ANNUAL REPORT
17 : 1989

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MANITOBA ENVIRONMENTAL COUNCIL

Manitoba

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Winnipeg, Manitoba
R3N 0H6

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Manitoba Environmental Council *Box 139, 139 Tuxedo Ave., Winnipeg, Canada R3N 0H6*

Our file:

April 1, 1990

The Honourable Glen Cummings
Minister of Environment
Room 344 Legislative Building
450 Broadway Avenue
Winnipeg, Manitoba
R3C 0V8

Dear Mr. Cummings:

I have the honour to present herewith Annual Report 17:1989 of the Manitoba Environmental Council.

This report details the Council's activities during the fiscal year ending March 31, 1989, and includes information regarding the Annual Meeting of May 6, 1989.

Yours sincerely,

Wayne Neily,
Chair

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REPORT OF THE CHAIR, IAN ROLLO

It is with some concern that I address you this morning. In the past two years, I have come to appreciate Council's relations with it's members, general public, news media and provincial government, and am concerned that all their views and opinions are condusive to the easy running and effectiveness of Council.

I am particularly concerned that the general membership be recognized for its labours, largely unseen. Their work appears only after much effort and heart searching at the committee level, undergoing careful scrutiny at our Board Meeting, and eventual public airing at our annual or semi annual meeting.

I am also concerned that our informal contact with the general public be recognized. This too is largely unseen, screened as it were by our very capable office staff. I must acknowledge the tremendous help of Sharon and Rory both for their efficient oiling of the machinery of office, and for their front-line efforts in screening the chaff from the grist and making my job that much easier.

The media, perhaps unfortunately, are less aware of our place in things environmental; our contacts are sporadic and not notable. Apart from public meetings much as this, our influence, is rarely noted. Perhaps we should take a more active role in public relations.

As a creature of Provincial law, it is encouraging to me that our efforts are, it seems, being more recognized by the Department. Funds either directly from, or supplementary to, Council's operating budget have allowed, to a somewhat greater extent than in the past, very valuable contribution from our rural sectors. Early discussion has indicated the possibility that Council, as of fiscal '90-'91, may become part of the standard departmental estimates procedure. Should such happen, formalization of our operating budget should benefit our operation, particularly in relation to much more active participation by our rural colleagues. Our hope is that the environment in its broadest sense, and its creature 'sustainable development', will attain a stature in legislation consistent with its importance in our province and country's overall ecology. In preparing for this meeting I asked the front office to collect my inward and outward correspondence in a single file. I was comforted that despite my chronic state of disorganization, both sides roughly balanced; a measure that things appear to be in reasonably good order (more due to organization in the front office than in my affairs).

As a new organization under the new Act, I felt it important to flesh out Council with members committed to active service in their area of interest/expertise. Consequently the notice mailed to all previous members informing them of the 'All Techs' meeting contained the message that participation in the meeting would be an indication of their continuing interest. This was followed up with individual correspondence to previous committee members to encourage their on-going participation. Based on the responses received, a list of recommended individuals went to the Minister for appointment to the new Council. As a result of this we have now a leaner, hopefully tougher, Council dedicated to its mandate and to having an even greater influence on environmental matters within the Province.

Notable among the everyday business of Council have been the several appearances, both in Winnipeg and outlying rural areas, before hearings of the Clean Environment Commission. These engendered much discussion at Board meetings; we are to hear of those later. Also after much discussion came our Bylaws, now finalized, but subject to ultimate approval by the Minister. A major change from our previous Bylaws is the subdivision of the Northern region into three parts - again, more on that later.

Briefly, other items discussed were - the controversial Rafferty/Alameda dam project; sewage lagoon at Powerview; the use of herbicides on Canadian National rights-of-way; Council's support for negotiations and the renewal of the

five-year Federal/Provincial agreement on reforestation; a fish-screen on the Mary Jane reservoir; the rezoning of Omand's Creek; Sussex Enterprises 'Waste Transfer Site'; Fripp Fibre Forms (possible use of C.F.C.'s in making plastic egg cartons); suggestions for improvements in the effectiveness of the new environmental impact review process in Manitoba; concerns about the proposed establishment of an International Centre for Sustainable Development; a position on the upcoming Manfor/Repap agreement; and so on.

In all of this, I have to recognize and thank all members of Council who have given so generously of their time for the ends we all believe in.

In passing on this Office to my successor, I am glad to say that during my tenure, things seem to have gone in the right direction.

REPORT OF THE VICE-CHAIR, KEN LACROIX

The M.E.C. has progressed well during the past year, with members working diligently in Council's interest. I will highlight my reflections of the past year's events.

In September, Dr. Rollo and I attended the 12th Assembly of Canadian Environmental Advisory Councils in St. Andrews, New Brunswick. The theme of the conference was that of "Setting the Environmental Agenda for Canadian Freshwater Policy to the year 2000". The workshops where most productive and provided much "food for thought" in producing a policy.

On October 29, Council held a Board meeting in Pine Falls, with invitations from Abitibi Price to visit reforestation sites in the area and to tour the pulp and paper plant. A public meeting was also incorporated into the day's agenda with local residents appealing to Council for input on a variety of environmental issues and concerns.

In summary, I would say Council has faced many challenges, some political and some financial, over the past year, but the dedication of our Chairperson and the members of the Board have carried us through. I found it to be an honour to serve with so many good people.

REPORT OF THE PAST CHAIR, DIANE MALLEY

My activities as Past Chairperson since May 1988 have included participating in a meeting of the M.E.C. Executive with the Minister of Environment and Workplace Safety and Health and Labor, Mr. Ed Connery, on 12 July to explore future directions for the Council and Council's role vis a vis the Minister and the public.

Other activities were suggestions to the Council to focus during 1988/89 on the environmental implications of biotechnology including genetic engineering and on forestry in Manitoba as an example of an economic sector for which sustainability has been a long-term concern. As a result of the latter suggestion an out-of-Winnipeg Board meeting was held in Pine Falls on 29 October 1988. The visit included a briefing by managers of the Abitibi-Price operation at Pine Falls, a tour of the pulp and paper mill and a tour of a number of reforested sites. I chaired an ad hoc committee to produce briefs for the semi-annual Council meeting on 3 December 1988 on forestry and reforestation, as well as on two other topics of current concern - the introduction of wastes into the two major smelters of Manitoba and the implications for Manitoba of construction of the Rafferty and Alameda Dams in Saskatchewan.

I represented the Council at a social event on 4 October 1988 preceding the meeting of the Canadian Council of Resource and Environment Ministers on 5 and 6 October in Winnipeg. The CCREM meeting was noteworthy in being the occasion of the announcement of the formation and membership of the Manitoba Round Table on Environment and Economy, the report of the National Task Force on Environment and Economy on progress in the year since they released their report, and the announcement of a national Pollution Superfund.

Activities as Past Chair during 1989 have included attending a Data Users Workshop on 15 February 1989 at the Fort Garry Hotel in Winnipeg organized by Environment Canada, Water Resources Branch, Manitoba NW-Ontario District. As part of a panel of non-government users of data and information produced by the Water Resources Branch, I presented an assessment of types of water data useful to the Environmental Council.

I participated in an ad hoc committee consisting of the Water and Waste Technical Committee and other interested Council members which drafted a brief to the Minister of Natural Resources on the Provincial Water Policies. This was submitted to the provincial government in April 1989.

Activities as Past Chair also included acting as liaison between Natural Resources Management Technology Course at Keewatin Community College in The Pas to continue the practice of the Council providing awards to the two students graduating at the top in the field courses. Responsibilities also included chairing the Nominations Committee which prepared the slate of Executive members, chairs of standing committees and of regional representatives.

As I complete a six-year term on the Executive of the Council, I am gratified to see enormous changes in the status of the Council, in terms of its embodiment in legislation and improvement in its level of funding during the 1989/90 fiscal year. After so much hard work on the part of the Council and so many years of mixed responses to our briefs and position papers, it is encouraging to see a rise in the level of public concern about environmental issues, a high profile for environmental issues by the media, the possibility that Winnipeg will be the site of an International Centre on Sustainable Development, and the initiation of activities on several fronts by the Manitoba government towards sustainable development and their goal of being leaders nationally and internationally in sustainable development.

"'Let's hope it works' ... exclaimed God as he created the World, and this hope, which has accompanied all the subsequent history of the world and mankind, has emphasized right from the outset that this history is branded with the mark of radical uncertainty". Thus, we each are needed and we each can make a difference.

Quote from I. Prigogine and I. Stengers, 1984. "Order Out of Chaos: Man's New Dialogue with Nature". Bantam New Age Books, 349 p.

REPORT OF THE COORDINATOR, RORY GREWAR

My duties as Coordinator officially began in September of 1988 when I was hired to assume Keri Barringer's responsibilities until the completion of her educational leave. Keri is presently pursuing a master's degree in Natural Resources Management. As some of you may know, however, my involvement with the Council precedes my coming to this position. I was first employed as a Research Assistant through STEP (Student Temporary Employment Program) during the summer months of 1988.

The greatest portion of my research activity during this time centred on an investigation of the Manitoba Public Registry Network, and consisted of both promotional and evaluative tasks. The project met with considerable success and was, in my opinion, a very worthwhile exercise. Promotion of the Registry's existence was achieved and some valuable recommendations for improvements were put forth. I think the Council can take a certain measure of pride for initiating and conducting a project which served to educate the citizens of the province as to a potentially valuable tool through which cooperative environmental management can be achieved. The final report, available to anyone interested in reviewing it, was submitted to the Minister's Office, departmental officials and to members of the Environmental Impact Assessment Committee.

Since September, Council's new Administrative Secretary, Sharon Gluting, and I have been engaged in a fairly major re-organization of the M.E.C. filing and record keeping procedures. The intent is to improve the accuracy with which data are kept and received by the office staff. I think we have met with considerable success, and hopefully the system will continue to improve so as to accommodate the ever increasing volume of data and information that is received.

Along with this reorganization of the filing system, many of the publications and reports, previously stored in the M.E.C. Office, have been transferred over and incorporated into the Resource Centre Library in Bldg. 2 on Tuxedo Ave. By doing this, Council's resource material will benefit from excellent cataloguing procedures and at the same time become part of a much more useful and expanded library. Council members have open access to the material in this library, and I would hope that use is made of this wonderful source of up-to-date information.

In terms of Council's operating budget, I must report that as in recent years funds have been limited and Council's activities have been influenced by this situation. Since moving to new offices on Portage Ave., the Council is incurring operating expenses previously not covered by our budget, such as equipment rental, building maintenance and all postage costs.

In addition to the increased administration costs, Council's intention to improve the effectiveness of its regional representation through increased travel allowance is further adding to the pressures exerted on the operating budget. I think consideration will have to be given to alternate methods of communication, such as the Conference Call, to reduce the very high costs associated with transportation and accommodation. Recent attempts to utilize this method of communication have proven quite successful.

Council's request for a summer student, under the Temporary Employment program, has not been granted this year. This is regretable in view of what I think would have been a very interesting study project into water consumption levels in the City of Winnipeg. (The original proposal having come as a result of consultations with members of the M.E.C. Executive and representatives of the Clean Environment Commission.) Hopefully the request, and the project proposal, can be re-submitted next year.

At the same time, and possibly in view of the fact that Council will not have the benefit of extra staff in the form of a summer research student, no formal request for M.E.C. involvement in the Department's annual Household Hazardous Waste Days Project has been received this year. Council was been involved quite extensively in the past, but I understand that the organizational aspects are quite different this year.

The past year has also seen a steady increase in the number of requests for information that the office receives from the public at large. Hundreds of telephone calls and written requests for information have been received and responded to. The Notice of the Publication of the 1987 Annual Report alone resulted in over 114 requests for copies. Clearly there remains a great interest in the work of the M.E.C., and a growing overall interest in environmental matters. The public information service that the Council is providing is becoming a major component of the office work load, and I think future consideration will have to be given to how Council wishes to deal with this aspect of their operation.

In connection with this, the office routinely receives inquiries as to the availability of individuals willing to speak on various environmental topics or issues of the day. These inquiries originate from a wide variety of community groups, social clubs, and public schools. In an attempt to respond to these requests, and thereby assist in fulfilling Council's mandate for public education, I would like to request your cooperation in establishing an Environmental "Speakers Bureau" through which speakers and audiences could be

brought together. Such a Bureau would serve as a catalogue of individuals, with specified areas of knowledge or expertise, willing to address interested groups and organizations. The M.E.C. office would act as intermediary between the identified speaker and the requesting group and serve to coordinate communication. Initial publicity of the bureau would also be arranged by the office.

At this point it is simply an idea, but I would recommend it as a partial response to the growing demands for information and education with which the public can approach the complicated questions of environmental management.

In closing, I would like to express my sincere thanks to the Council, and in particular the members of the Board of Directors, for their support and encouragement throughout the past 12 months. The experience has been both interesting and informative, as I must admit my knowledge of environmental issues prior to my term with the M.E.C. was limited, and has provided me much valuable experience with which to further my academic and professional objectives. Perhaps most importantly, however, my association with the Manitoba Environmental Council has provided me with an insight into some of the pressing environmental problems facing the people of this province, this country, and in turn the peoples of the world. I wish you continued success in your endeavors, and for the sake of Manitoba's future sincerely hope you succeed.

PUBLICATIONS COMMITTEE REPORT

In the past year, a serious effort has been made to deal with the publications backlog that dates back as far as 1984. Over the past four or five years, M.E.C. financial constraints have forced publications to be postponed in favour of pursuing other M.E.C. objectives. Recognizing that Council's funds are still limited, it was nevertheless felt that the outstanding publications must be dealt with in some definite manner, in order that Council's members and committees would be free to concentrate on tackling new issues rather than having to return constantly to deal with historical (and by now possibly outdated) matters. To date, the backlog has been resolved as follows:

Proceedings of the Symposium - Manitoba Wildlife into the 21st Century.

Reporting a forum which took place in March 1984, this document represented the most complete of the outstanding publications. Considering the amount of work that had already gone into the editing of this document and the fact that the forum which it records was a major M.E.C. undertaking, it was decided that this work should be completed and the document published. The manuscript is currently in the process of final review and is expected to be completed during the summer of 1989, in preparation for an early fall release date.

Manitoba Provincial Parks - A Model for Wildlife Management and Potential Sources of Groundwater Contamination in Manitoba.

These two works were originally assigned as research projects to be undertaken by STEP students during the summers of 1984-1986. Having been evaluated by the Wildlife Committee and the Water and Waste Committee respectively, the recommendation presented to and agreed upon by the Board was that neither of these documents should proceed to publication. Copies of these documents will be retained on file in the M.E.C. office for consultation by interested Council members.

Proceedings of the Symposium: Forestry Multiple Use and the Environment

This document reports on an M.E.C. symposium that took place in December 1985. The transcript of the symposium forms the first draft of this publication, which has been submitted to the Land Use Committee for evaluation. The decision to proceed with editing is pending the recommendation of that Committee.

Preparation of the 1987-88 Annual Report of the Manitoba Environmental Council was another publication priority. Though M.E.C. is no longer required to prepare an annual report under legislation, it was felt that such a report provides a valuable permanent record of M.E.C.'s activities and, as such, should continue to be produced.

Following the precedent seemingly established in past years, preparation of the 1987-88 Annual Report did not commence in earnest until January 1989. Over the years, technical committee chairs and regional representatives have become increasingly lax in submitting a written annual report summarizing their year's activities and concerns for inclusion in the M.E.C. Annual Report. The absence of an advance call (reminder to board members) for submissions, the failure to set clear deadlines for submissions and the lack of immediate follow-up with those board members that have not submitted a report at the time of the annual meeting make it difficult, if not impossible, to prepare a comprehensive annual report almost a full year later. Compounded by fuzzy memories and inconsistent filing systems, putting together the annual report has become, if nothing else, a challenge to those involved in its issuance.

Since there does not appear to be either any clear reason or explanation for delaying the production of the annual reports, it is hoped that future annual reports will be prepared during the summer months immediately following the annual meeting in readiness for presentation to the board in September, or shortly thereafter. This would allow board members to comment on content or layout (something which has not been possible in recent years due to the last minute rush), to provide sufficient time to make editing changes and to enable the release of the annual report no later than following year's semi-annual meeting in December!

As a final point, it is hoped that the council's inclusion in the government budgetary estimates process may result in increased funding in the near future and that a portion of those funds may be earmarked for publications. It should be noted that between 1974 and 1984, Manitoba Environmental Council released an average of two publications per year, in addition to annual reports. These documents were professional, highly regarded publications. In the period from 1985 to the present, only one document has been published. It is hoped that once the publication backlog has been cleared up and once an increment in funding is achieved, that M.E.C. can once again resume its former practice of publishing respected works on environmental concerns.

Ingrid Schram, Acting Chair.

TECHNICAL COMMITTEE REPORTS

EDUCATION COMMITTEE

The Education Committee met four times during the past fiscal year in September, January, February, and April. At these meetings some objectives for the committee were established and progress made in accomplishing these. Public education programs for environmental awareness were discussed but shelved pending improvements to the M.E.C. budget. One program in this vein will be a public forum on environmental education in Manitoba in conjunction with an Annual General Meeting of the M.E.C. There was extensive discussion of the environmental content of the education curriculum for Grades K to 12 in Manitoba in preparation for a position paper or brief by the committee. The committee has also looked at developing or initiating the development of an environmental resource package for educators in Manitoba.

Mark Trottier, Committee Chair

ENERGY COMMITTEE

Activities of the committee centred on the preparation of a brief dealing with environmental assessment and compensation issues as they apply to Hydro-Electric development in Manitoba. Complete text of this brief, as submitted to the Minister of the Environment, is contained in this Annual Report.

Martin Egan, Committee Chair

ENVIRONMENTAL CHEMICALS

Three committee meetings were held but members participation was poor, so progress on our objectives was limited.

I. Herbicide Use on Federal Lands in Manitoba:

A 'Public Notice' was published 20 Feb, 1988 with information on the CN herbicide control program for 1988 in Manitoba and requesting that comments be sent to the Department of Environment, Workplace Safety & Health within 15 days. Copies of responses from the Manitoba Environmental Network and from E.B. Johanson were brought to our committee's attention. In addition to concerns about the direct effects of herbicide use on non-target plants and animals there are concerns, particularly in northern Manitoba, about the reduced opportunities for employment in clearing brush and of possible poisoning of edible berries.

1. Policy: In response to our query, the Minister of Environment gave the following information (E. Connery to I. Rollo, 17 Nov, 1988):

   a) The jurisdiction over environmental matters on the lands in Manitoba controlled by federal departments and Crown Corporations rests with Environment Canada. However, the provincial Environment Department has developed a close working relationship with local officials of Environment Canada and an informal agreement has been established whereby standards imposed by Environment Canada will be at least as stringent as those imposed by the Province in areas of Provincial jurisdiction.

   b) There are no formal intergovernmental agreements covering herbicide use on Federal Lands. By informal agreement, however, federal departments and agencies have agreed to operate under the terms and conditions of the Manitoba Pesticide Use Permit Regulation filed under The Environment Act. This regulation requires public notification of intended spray programs, receipt of a Use Permit from the provincial Environment Department, and compliance with the terms and conditions of the Permit.

   The concerns of those who respond to the public notification are incorporated into the Permit to the extent possible, such as imposing a restriction on the proximity of spraying near watercourses.

   If violations of the Permit conditions are noted, the matter is referred to Environment Canada for follow-up action.

   c) The policy of the Provincial Department is that the use of herbicides on federal land (as well as provincial land) is acceptable, provided that the product is duly registered by Agriculture Canada for the intended use, and that label directions regarding application rates and restrictions are adhered to.

2. Practice: To obtain a "Pesticide Use Permit", the applicant hes only to advertise and to satisfy the Director, Pesticide Control that their usage conforms to the Regulations. Only 15 days are allowed following the publication of the notice for comments and concerns are incorporated into the Permit to the extent possible. Although public hearings on matters of concern are possible under the Environment Act, the Pesticide Regulation (Manitoba Regulation

94/88R) does not provide any mechanism for hearings. The Clean Environment Commission apparently has no jurisdiction for pesticide applications.

In 1988, CN applied 6883.59 kg of granular herbicides to 247.2 ha of the ballast section of tracks and sprayed 7891.61 t. of Tordon 101 onto 440.2 ha of rights-of-way for brush and weed control (information from F.D. Campbell, Vice-President, CN, 20 December, 1988). In addition, herbicides will be used by other federal agencies (e.g. Transport, National Defense, Parks).

3. Concerns: Current practices and regulations for the issuing of Pesticide Use Permits do not encourage consideration of environmental and social concerns about the use of herbicides in areas with natural vegetation.

   a) The 15-day limit for response to advertisements is ludicrous for northern residents and highly restrictive for volunteer interest groups and persons wishing to respond.

   b) Designation of the Director, Pesticide Control, as the authority for decisions regarding public hearings is not compatible with the objectives of the Environment Act for public participation in matters of environmental concern.

   c) The requirements for obtaining a Pesticide Use Permit do not include consideration of the impact of herbicide use on rare and endangered plant species, or on water.

   d) Provincial agencies (e.g. Manitoba Hydro, Dept. of Highways, Parks) and municipalities are covered by the same regulations.

4. Future Actions: In 1989/90 the committee should:

   a) investigate herbicide use in natural areas of Manitoba by federal and provincial agencies;

   b) attempt to stimulate the adaptation of the "Guidelines for Herbicide Use in Manitoba" to include uses other than forest management and to urge the adoption of the revised guidelines by all provincial and federal agencies applying herbicides in Manitoba;

   c) review the Environment Act and the Pesticide Regulation and urge the Minister to take appropriate steps to allow public hearings before the issuance of Pesticide Use Permits.

II. C.F.C.'s in Manitoba

During the past year, our previous (Mr. Ed Connery) Minister asked the M.E.C. to report to him on ozone depletion. Although we thought that this was much too broad a topic for our organization we were planning to examine chlorofluorocarbons (C.F.C.) use and disposal in Manitoba.

Independently, a M.E.C. member expressed concern about possible C.F.C. emissions from the new plant of Fripp Fibre Forms and other industries in Manitoba. A letter requesting information on C.F.C. use and emissions by Fripp Fibre Forms was approved by the Board and sent to our Minister in March 1989. No reply has yet been received.

Parallel inquiries by the M.E.C. coordinator, Rory Grewar, elicited a background paper on chlorofluorocarbons and halons in Manitoba and other information from the Manitoba Hazardous Waste Corporation. This Corporation is not aware of a directory of companies that use, emit or dispose of C.F.C.'s in Manitoba.

The City of Winnipeg recently established a "Task Force on C.F.C. and Halons" and Mr. Chris Kaufmann, will report on its objectives and current activities.

Herbicides and C.F.C.'s are important topics for the M.E.C. in the next year. Our response depends on the participation of members in the committee work. Unless the response is better than last year, we will attain little. The help of Rory Grewar in the office and of D. Punter, C. Kaufmann and D. Muir are gratefully acknowledged.

W. J. Turnock, Committee Chair

Report on the City of Winnipeg's Task Force on C.F.C.'s and Halons
(Supplement to the Environmental Chemicals Committee Report)

City Council on Feb. 15th 1989 adopted a report by E.P.C. which contained the recommendation:

> "That the City of Winnipeg commence an immediate review of its own facilities and operations to determine where reduction or elimination of chlorofluorocarbons and halons can be made. The review, to be completed in 4 months, should be made available to Councillors and appropriate standing Committees upon completion."

Pursuant to this recommendation a Task Force was appointed with members from the Health Department, Operations Department, Parks and Recreation Department and Department of Environmental Planning. I am the member from the Environmental Planning Department.

The mandate of the Task Force is to review City facilities and operations to determine where reduction or elimination of C.F.C.'s and halons can be made.

We have set ourselves two tasks:

1) prepare a detailed inventory of all C.F.C.'s and halons in the City;
2) prepare recommendations on a strategy to reduce or eliminate C.F.C.'s and halons in the City establishment.

The purposes of the inventory are:

1) to learn the magnitude of the problem;
2) to share this information with others;
3) to arrive at strategies for
   a) purchasing practices,
   b) recycling – recapturing – banking,
   c) disposal of banked C.F.C.'s.

The Task Force recognizes that the City cannot go it alone in this endeavor but it sees the City's role in being prepared to act when Provincial and Federal legislation comes into being and perhaps give impetus to the formation of such legislation.

The Environmental Chemicals Committee should further investigate C.F.C.'s and halons in Manitoba in cooperation with other organizations with emphasis on the preparation of a directory of users, emitters and disposers of these chemicals.

Chris Kaufmann

ENVIRONMENTAL IMPACT ASSESSMENT COMMITTEE

This committee has been active all year with meetings every month since September and with eleven regular members, who have made it productive by sharing the workload, vis. Vice-Chair Basil Rotoff, Andy Burzynski, Nick Carter, Robert Inman, Stan Kaczanowski, Chris Kaufmann, Bill Langford, Betty Pawlicki, Donovan Timmers, Jim Tomko and myself as chair.

We have seen our primary objective as trying to ensure that the environmental impact assessment and review process in Manitoba functioned as well as possible, with secondary functions of monitoring the Public Registry to direct attention of other committees to applications that should be examined, and to watch for developments for which no license

has been sought, as well as preparing representations on behalf of the Council on E.I.A. issues that don't clearly fall in the domain of any other committee.

With the unfolding of the process under the new Act last autumn for the first major (class 3) project, it became apparent that there were serious problems in the process, and these were addressed in the Council's brief to the C.E.C. hearings on the Canamax application, prepared by this committee.

The Commission's Canamax Report, which appeared about March 1, did not deal with these recommendations, so the Board, on the committee's advice decided to pass these on directly to the Minister, with some modifications. This was done about mid-March, but no reply had been received by the Annual Meeting. For the record, these are the recommendations made at that time to improve implementation of the Environment Act:

1. that as a basic principle, preliminary environmental impact assessment (E.I.A.), including public hearings for controversial or major developments, should occur prior to approval-in-principle of a development;

2. that a committee be established including representatives of the Department of Environment, the Council and the Clean Environment Commission, to establish general procedure with respect to the scope of stages in environmental assessment and licensing, advertising, and identification of points where opportunity for public input should be provided;

3. that, wherever a public hearing is not automatic or announced in advance, at least four (4) weeks be provided for public comment or input, subsequent to advertisement of the application;

4. that, in addition to the monthly "Public Registry Network Report", Chairs of the Council, of the Clean Environmental Commission, of the Manitoba Environmental Network, and any other environmental groups that request it, be supplied automatically and immediately (by mail) with notices of applications for licensing of class II & III developments at the time of public notification under sections 11 (8) (a) of the Act;

5. that, full details (including environmental assessments) for all Class II and III projects (not just those of the Winnipeg Region) be maintained in the sub-registry at the Winnipeg Centennial Library, with the Department covering any additional costs to the Library, or that the Central Registry be made accessible to the public after hours and on weekends;

6. that at least six (6) weeks be provided, except in situations of urgency, between the date a public hearing is called concerning an environmental impact assessment and the date it is held;

7. that there be a mailing list established similar to that recommended in 4 above, to directly inform concerned organizations of impending hearings at the time of public notification (advertising);

8. that no license be issued under the Act for any development until at least a brief Environmental Impact Assessment has been filed and placed on the Public Registry.

Other issues with which the Committee has dealt include: the Fripp Fibre Forms foam packaging plant, the Provincial Water Strategy, another proposed Omand's Creek development (Winnipeg), review of Ministerial Agreements, various golf course license applications, hazardous waste storage areas, the Charleswood - St. James bridge, the Sikaman Gold Resources (Snow Lake) milling proposal, the Duck River dam proposal, the Dow-Corning proposal with respect to Black Island, and the general problem of mine tailings.

The major effort during the past few months has been to identify the major weaknesses in the Environment Act with respect to the E.I.A. process and to recommend changes to

it. These are as in the brief adopted at the 1989 Annual Meeting.

Wayne Neily, Committee Chair

LAND USE

No Report

Dennis Muldrew, Committee Chair

WATER AND WASTE COMMITTEE

The Water and Waste Committee met three times during the 1988-1989 year.
The following items were dealt with:

1. A brief was sent to Mr. Ed. Connery, Minister of Environment and Workplace Safety and Health, requesting that he write to the Minister of Natural Resources informing him that adding salt to the gravel, to be dumped in the Mary Jane Reservoir located in Mary Jane Creek near the town of Manitou, is detrimental to the fish and pollutes the water. (Gravel is used in the installation of fish screens so that fish migration can be stopped.) Dr. Eva Pip initiated the above brief.

2. Mr. J.D. Robertson, of Dauphin, Manitoba, wrote that the Park Staff of the Riding Mountain National Park is applying tons of salt on the #10 Highway that runs through the park. The salt affects plant life adjacent to the highway and attracts wildlife endangering their lives. The committee proposed that a letter be written to our Minister to inquire into the above matter and to request that he take some steps to curtail excessive salt application.

3. It was recommended by the Committee that a letter to the Minister of Environment be written asking him to write to the City of Winnipeg regarding the dumping of snow on Winnipeg rivers as the salt in the snow is detrimental to fish and deteriorates water quality. The snow may be dumped on the ground designated for this purpose so that direct addition of salt in the rivers does not occur. In addition the city of Winnipeg should consider applying salt on Winnipeg streets judiciously.

The Board of Directors, at the March 14, 1989 meeting decided to delay the action on above #2 and #3 items, pending information to be received from Mr. B. Wild on an organic salting product.

Dr. A. Maniar, Committee Chair

WILDLIFE COMMITTEE

Again, over this past year, the Wildlife Committee's regular monthly meetings were characterized both by good attendance and by active participation from its members.

A topic selected for particular emphasis at the outset was the potentially detrimental environmental effects in the wake of the then pending Canada/USA Free Trade Agreement. The Committee regarded the negative implications of the FTA to be of such significant magnitude that planning was commenced and an offer conveyed to M.E.C.'s Board to organize a public forum coincident with Council's December 3rd Semi-Annual Meeting. With the writ being issued for the federal election, however, the committee decided that this forum might have adopted the character of a post-mortem. In its stead it was deemed more effective for members to participate individually at a November 16th (just prior to election day) forum on "Environmental Implications of the Free Trade Agreement", sponsored by the University of Manitoba, to distribute informational literature to M.E.C. members and to prepare a brief for presentation to Council's December meeting. This brief was adopted by the general membership and was subsequently forwarded to our Minister.

Information is being gathered and work commencing on soil erosion and reforestation, two topics within the purview of the Land Use Committee with whom the Wildlife Committee wishes to collaborate.

With a change in the provincial government and a potential change in its views since M.E.C. adopted a brief on the dangers to wildlife from Game Ranching, the committee wants to review and perhaps reaffirm its position for the current Minister.

The Committee examined efforts to reintroduce the Swift Fox to a range from which it had been extirpated, almost inadvertently, as a consequence of habitat destruction and broad-spectrum predator control programs. It was thought that a lesson could be learned to exercise greater care towards "non-target" species when actively applying seemingly unrelated alterations to vegetative cover, drainage patterns, etc. The Committee will be obtaining information on plans which Natural Resources may have for the re-introduction or build up of any wildlife species in this province.

A development proposal to construct a carwash over Omand's Creek, just north of Portage Avenue, was viewed as detrimental to wildlife and would undermine the extensive efforts to reestablish native prairie in the area immediately upstream. The Committee, mindful of expediency, opted to ask M.E.C.'s Board to write to Mayor Bill Norrie conveying its concerns and encouraging the Mayor's positive intervention. Though a carefully worded letter was dispatched within 24 hours of the committee's approach to the Board, the Mayor's subsequent response was considered to be inconclusive and ineffective. Efforts and avenues are being considered to permit the resurrection of native prairie in this modest section of urban Winnipeg.

Continuing the pattern of last year when the Committee invited to address its meetings the Director of the Wildlife Branch and a member of the Caribou Management Board, this year, Mr. Worth Hayden, Director of the Fisheries Branch of Natural Resources, spoke at our February 28th meeting. Mr Hayden graciously responded to the Committee's concerns on a variety of topics including fish hatcheries, the Dauphin Lake pickerel rearing project and the purposeful introduction of foreign species, such as the Zander, to neighbouring waters in North Dakota.

A Committee member, acting as part of another organization, brought to the Committee information of his actions on the Rafferty-Alameda dam. It is noted, with gratitude, following the court decision requiring an environmental impact assessment that the Natural Resources Minister of that time, Mr. Jack Penner, was apparently smitten with sufficient new information as to completely reverse his former stance which consistently had favoured the project. Just prior to his removal from the Natural Resources portfolio, Mr. Penner pledged to ensure that Manitoba's interests would now be protected.

The Wildlife Committee has a number of projects which are on-going and which are anticipated as culminating in future briefs to the Minister of Environment. It has been noted that a whitefish resource is largely wasted by commercial fishermen on remote lakes. With a minimal and undependable market through the Freshwater Fish Marketing Corporation for this product, much is simply regarded as a disposal problem where the fish could supply needed fertilizer for nitrogen-poor northern garden soils or as feed for local fur or even livestock farming operations. Salt application to our highways, in addition to other known detriments, attracts wildlife to the dangerous proximity of speeding vehicles. A member has targeted the salt application rate and frequency within Riding Mountain National Park as being particularly great. With the relative abundance of wildlife living inside the Park's boundaries, serious concern is expressed. Another member noted a usual respect for buffer zones around water bodies where no logging is permitted to be practiced. However, though eagle nest trees, which are visually obvious, are often thus protected, the somewhat less obvious eagle roost trees have been cut down to the detriment of the nesting population.

As, no doubt, with some of M.E.C.'s other technical committees, much of the work of the Wildlife Committee is particularly applicable to areas of the province outside the enclosure of the Perimeter Highway. It is stated that the dearth of Council's funding completely precluded even minimal transportation reimbursements to be offered

to rural members for their attendance at our regular meetings. Certainly this and likely other Committees' viewpoints would be diversified and broadened were sufficient financing available to permit participation from beyond our Winnipeg Base.

Barry R. Wild, Committee Chair

REGIONAL REPORTS

CENTRAL PLAINS

No Report

J.A. Knight, Regional Chair

EASTERN

Thank you Mr. Chairman for the opportunity once again to bring Greetings from East-Man and submit the Annual Report for the Region.

The budget constraints have imposed hardships on all of us on Council. The Regional Chairs, as a group, are made more aware of it, probably because of the out-of-pocket costs incurred in attending the meetings of the Board and special Task Force sessions that are important to their Regions. Quoted in "News and Views", Willard F. Rockwell Jr. commented on government spending. ["A great many of us seem to have lost sight of the fact that "the government" owns absolutely nothing. If it promises to give you something, it must first take it from you. Many sincere and respected public officials and lawmakers may have forgotten this simple truth; they may persuade themselves that the government is rich and has unlimited resources. The truth is that it is penniless; before it can spend, it must take from the people."]

Since being appointed in Spring 1976, along with many others, I have devoted thousands of hours to Council activities, much of it responding to specific government requests for our inputs. To my knowledge, such requests have yet to be refused. At the risk of appearing crass, the most significant 'Thank You' would be adequate funding to cover money we each take away from our families to do the job we know is important for government's decision-making process.

It happens every Spring, and Fall. My annual special persons project involved cleaning the road allowance from our home on P.R. No.214 a three mile round trip to PTH No.44 at Seddons Corner. Twelve years ago when I started doing this I filled seven large garbage bags. It has decreased now to only three. Maybe it has been worth it because this year the local 4H Club covered some 45 miles of PTH No. 44 on a week-end when the public could see the mountain of trash that had accumulated. Very little seems to be hiding there procreating, or whatever it does down there, thus making our part of the world a little nicer to live in. We are doing a similar Clean-A-Thon throughout the Whiteshell Provincial Park on June 10th because it's a place that a lot of us love as much as our own home. Future plans include a cooperative effort between the Manitoba Hazardous Waste Management Corp., the Parks Branch, and all of the organizations in the Whiteshell to do a long-needed Household Hazardous Waste Blitz for the 3400 cottagers. It's amazing how many horrible goodies will accumulate, even at a cottage.

This past year has been an extremely active period.

Winter snow cover was cleared from stocked trout ponds to provide adequate oxygen levels. The Milner Ridge Pond has been adopted by the Correctional Centre as one of its projects with the added incentive of some ice-fishing to motivate the volunteers, residents of the Centre. It has created some interesting stories.

This year's major achievement was the creation, in cooperation with Darren Praznick MLA and Legislative Assistant to the Premier, of an Environmental Advisory Group. The members come from all sectors of our socioeconomic fabric. Our mandate, by consensus, is to provide the public concerns and conscience on environmental issues. Meeting quarterly, we network between meetings. As yet we have not extended south of the Trans Canada Highway.

A small but significantly important group from our farming community have expressed deep concerns about the restrictive prohibitions contained in the federal legislation and regulations under both the Plant Breeding Act and the Seed Act. The net result is that unless you have a PhD in plant science, or are one of the multi-nationals, it is against the law to create new and better grains for sale to others or even as a gift. This elitist repression of talented agronomists efforts is to be deplored. Most of the advances made in the past on development of suitable grain strains came from these farmers who had been able to identify and resolve a specific need. If everyone where to grow something called, for example, Canada Supreme, the diversity would be lost and if disaster were to strike it could decimate the crop for the whole Prairie grain belt.

The government has initiated the development of a Provincial Conservation Strategy, commencing with Land and Water, in response to the Gro Brundtland Report. Council should be sensitive, on an on-going basis, to any deviation from the guidelines laid down in the World Conversation Strategy recommendations. Part of Council's function should be to reiterate and interpret these guidelines into the context of Manitoba's implementation.

The Public Registry Network Report is too important to be overlooked. The need for a workable Environmental Impact Assessment process is evident but, it seems, the mechanism has almost secret existence of its own, away from the public scrutiny called for under the Act. Similar to the accepted need that the Law must be seen to be carried out, so too is it just as important now that the EIA must be seen to be done for the protection of our common future on our planet.

The Clean Environment Commission Report and Recommendations from the Public Hearings on stubble and peat burning held from October 20th to December 7th 1987 have been eagerly anticipated for over a year now by many who took the time and trouble to participate. This is particularly applicable to the East-Man Region because of the combined effects of both the agricultural crop residue burning and the burning practices on our Peatlands. Many of us went through a futile exercise in the 1976/1977 Hearings on the same matter when the Report was shelved in July of 1977. The fatalities in road accidents and the damage suffered by the environment dictate that the imposition of this fate upon the current document must not be tolerated. If I recall, only three of the 86 recommendations of the former document were implemented either in whole or in part. I understand that Council's submission covers every point in the current one with the exception of a couple of excellent additions. This might be interpreted as placing the onus on Council to follow-up closely the implementation of the current Reports' recommendations.

Of continuing concern is the reclassification of marginal lands to agricultural category and sale of some to comply with a farmer's need to have arable, cultivated land for grain quota purposes. The results are often disasterous in terms of natural resources wasted and public and private money dissapated uselessly, in the long-term. At the same time a lot of other natural resources - wildlife, fish, forests, and water tables, are adversely impacted.

Access to the Environment Department Library resources is appreciated. I confess that only once have I been able to avail myself of this facility. Maybe we need to make the time to become more familiar with help that could be provided on our investigations of environmental issues.

This logically ties in with Freedom of Information. Again, it is an unfamiliar resource which is available to provide information when the usual sources draw a blank. My initial impression of its value is passively negative from observing the success of others.

As a member of the Conservation Strategy Association of Manitoba, I must commend Council for "Mothering" such an endeavor. It has been, and is more than ever now, deeply appreciated. There is an opportunity for both organizations to work together cooperatively in regard to the Premier's Round Table.

Between us, and networking with others as applicable, the apparent vacuum of activity and policy direction might well be resolved.

With over 25 trips a year to Winnipeg meetings of Council and on Council matters alone, I can appreciate the dilemma of the other Regional Chairs and rural members. Taking this the logical step further, when you become a regional resource to the public, school teachers and students because of the lack of any viable alternative, it can, and does, impose a heavy burden of time and expense upon the individual. It is very much a mixed blessing : a joy to be able to be of help and a pain to reach once again into the limited resources of a family budget for travel, copying of materials and postage, stationery etc. I'm sure we will continue to do our best to fill the needs and have the sense of pride, on Council's behalf, that we are able. Thank you all.

Rick Howard, Regional Chair

INTERLAKE

This report will attempt to summarize some of the environmental concerns and activities in the Interlake area.

In response to an article on the possible start-up of a Dow Corning plant in the Interlake area, the Naturalist Society of Manitoba expressed concern about expanding operations of the silica sand quarry on Black Island located in the Hecla Provincial Park.

There is also the yearly problem of the concentration of big game hunters in and around small Wildlife Management Areas which cause concern for the safety of people and livestock in the adjoining areas.

Some interesting programs have been implemented on the Icelandic River and Wavey Creek. Stones have been placed in the beds of these rivers to create eddies and current changes to encourage fish spawn. This is an experimental program and there are hopes for good results.

The new regulations written into the 1989 Manitoba Sports Fishing Guide state that to protect and preserve the walleye and channel catfish fishery on the Red River, from Lockport north to Lake Winnipeg, all hooks will have to be barbless so that the mortality rate of the fish will be reduced. The other important regulation states that only one trophy kill of a walleye over 28 inches will be allowed and one channel catfish over 33 inches will be permitted per fisherman per year.

The Parks Branch held a meeting with concerned citizens at Winnipeg Beach regarding increased involvement and use of the Winnipeg Beach Provincial Recreational Park. Suggestions where made and discussed and ideas where presented, resulting in a very productive exchange. This meeting also served to introduce the people to the new park manager for the Interlake region.

The Manitoba Hazardous Waste Management Corporation is holding a number of possible site selection meetings in the Interlake. There seems to be quite a vocal and organized objection to their presentation especially in the rural municipality of Bifrost and the town of Arborg, where a petition of one thousand names against the possible site location in that area, was presented. This is a very contentious issue in the Interlake and has generated a number of letters to the editors and editorials in the local newspapers, both pro and con.

The Land and Water Strategy meeting was well attended in Gimli with a number of municipal Reeves presenting briefs. Interested individuals also expressed their concerns about the full impact regarding the environment and sustainable development. There was a sense at the meeting that environmental issues have begun to concern the average person. Hope was expressed that the upcoming Land Use Strategy meetings would be equally well publicized and promoted.

Eugene Sheremeta, Regional Chair

PARKLAND

Many portions of Manitoba's Parkland were subject to extensive and devastating flooding

last spring. No sooner had the waters subsided and disaster relief programs begun implementation when a summer-long drought, with its equally large personal, environmental and financial detriments, commenced. Through a succession of mostly government (all levels) interventions which allowed, encouraged or accomplished the deforestation of headwater areas, the clearing of marginal land for agriculture and the alteration and "improvement" of drainage patterns, a modestly rapid snow melt and/or a somewhat heavier than normal spring rainfall, not unpredictably results in wide-spread and disastrous flooding. In the wake of the land's artificially reduced ability to retain essential moisture it is no longer uncommon for the area to experience the detrimental effects of natural droughts exacerbated by man's interventions. The Parkland seems, of late, to cycle between extremes of too much and then not enough water with each extreme of the pendulum's swing necessitating dollar input for compensation. Sadly, no quantity of money paid to victims will ever ameliorate the destroyed habitat (forest, soil, etc.) though such compensation schemes may succeed in deluding Manitobans into believing that there is nought amiss with our established stewardship of the environment.

This is now the third consecutive year that Lake Winnipegosis has been closed to commercial fishing. This closure is a result of cooperation between fishermen and government and has been done in anticipation that the reduced fishing pressure would restore the lake to the viable economic base such as it formerly was. Prior to scheduled reopening of commercial activity this summer the current provincial government authorized a small mesh season for perch.

The number of charges laid for poaching offenses in the last half of 1988 have risen by more than 200% in the Dauphin/Winnipegosis and Grandview/Lake Manitoba area compared to the same period of the previous year. Charges in other areas of the Parkland are roughly comparable to the level of the former year. Supervisor Don Knox indicated that there likely was not an increase in offenses committed rather an increase in the effectiveness of enforcement.

The Council of the R.M. of Dauphin has reversed its former policy which virtually prohibited subdivisions of less than 80 acres. The new measure is less stringent than the former one and allows rural residential splits of land for retiring farmers or their children and for surplus farm yards. This change brings the RM of Dauphin more in line with policies in effect in other municipalities in the area. The permitted subdivisions are not to have detrimental effects on agriculture and further must meet guidelines set out by the Council.

A joint study which began almost two years ago between Manitoba Natural resources and Parks Canada to monitor the movements of black bears in and around Riding Mountain National Park is continuing with 35 bears having been fitted with radio transmitting collars. Where the bears have outgrown their direction finding collars or where the batteries have become defective a wildlife technician has been locating the dens of hibernating bears, tranquillizing their occupants (as bears are not truly asleep during hibernation) and then changing collars and making observations on the bears' size and physical conditions.

The recycling of soft drink containers is becoming very popular in the Parkland. The Manitoba Soft Drink Recycling Inc.'s "Recyclomobile" makes a stop in Dauphin (the only location, so far, in the Parkland) every three weeks and company management has described the community response as both phenomenal and consistent. In the last 9 months of 1988, for example, people turned in about 4 tonnes of aluminum cans (300,000 cans!) and about 2.5 tonnes of plastic bottles. Through this single recycling effort the streets of Dauphin are notably devoid of some of their former litter, the town's landfill site has an additional 20 m^3 of unused capacity each year and significant amounts of energy are being conserved when these quantities of aluminum and plastic can be reused instead of commencing anew with raw materials.

After some Winnipeg schools reported high lead levels in their drinking water supplies, tests were undertaken in several Dauphin-Ochre River schools with each test

registering well below the 0.05 mg/L government standard. Prior to receiving the results of the tests, schools had been running their water in the mornings to flush out potential lead concentrations.

In February, the Council of the R.M. of Dauphin passed a resolution showing their intent to support the formation of a conservation district for the Lake Dauphin drainage basin. Discussions are proceeding with the other municipalities involved and if those discussions prove fruitful then the proposed district is estimated to require between 2 and 3 years to be established. If the final "West Dauphin Lake Conservation District" mirrors the current planning then it will approximate, in size, the Whitemud Conservation District, currently the province's largest.

Municipal leaders from the R.M. of Ste. Rose and the L.G.D. of Alonsa have for some time been openly receptive to the location of the province's hazardous waste management facility in their area. At the end of January an open house was sponsored in Ste. Rose with six representatives of the Manitoba Hazardous Waste Management Corporation in attendance. After public hearings in various locations around the province last year, the Corporation has returned to communities which have invited them back and which have suitable land areas (underlaid by at least 10 m of clay and glacial till). It was stressed by both municipal officials and Corporation representatives that community support was essential for the plant to be located in that area. Public reaction was mixed with some individuals expressing environmental concerns and others focusing on welcomed employment prospects.

United Grain Growers has announced an agreement with the federal government which would allow UGG to start operating an off-track elevator in Ste. Rose. Grain which has historically been shipped from the area's farms on the Canadian National Railways line will henceforce be trucked to McCreary or Dauphin for elevation and loading into rail cars. It is anticipated that CN will apply to the National Transportation Agency of Canada for abandonment of its rail line into Ste. Rose.

Ian Morrison, a Park Warden in Riding Mountain, that island of wilderness surrounded by a sea of agriculture, is engaged in a wolf monitoring program. He has reported that in the last decade population estimates have varied from 78 to 52 animals with the latter figure and lowest ever estimate applicable to last year (1987/1988). Though there are still twelve identifiable packs within the park, two of these "packs" are composed of only one individual and five have three or fewer members! As successful wolf hunting depends on teamwork to bring down the larger prey which they live on and as success in hunting is related to learned experience in that activity, it is thought that these small packs are likely doomed to disappear from the population. Morrison is also performing post-mortem examinations and testing for the presence of unusually high levels of cadmium in wolf carcasses. An abundance of this metallic element is a measure of changes in soil chemistry, particularly those which could be due to acid rain.

Relatively modest snow fall amounts in the Parkland area this past winter have posed no unusual hardships for the natural feeding of big game animals. The Swan Valley Wildlife Management Association had built and stocked deer feeding stations during the heavy snowfall year of 1985 but has not had to continue this practice since then. This year, with significantly more snow farther south than here, the Association members have sent a $500 donation in financial support to the Scratching River Game and Fish Group so that they might further their efforts at emergency feeding. Neither of the two provincial programs (the Emergency Feeding Program and the Shortstop Feeding Program) announced recently by the Natural Resources Minister are expected to impact on the Parkland but should have their combined estimated total expenditures of $400,000 devoted to western and southern Manitoba.

Following last year's drought and this winter's sparse snow accumulations (Gilbert Plains has received about 75% of normal snow fall, Dauphin about 50% and McCreary only about 25%) the Manitoba River Forecast Centre is predicting continued water shortages into the spring. Many area farmers

have been hauling water for their livestock or dairy herds for some months now and the PFRA has implemented a financial assistance program to partially defray these costs.

A somewhat unusual effect of the drought is the carryover of greater than normal amounts of certain herbicides. For example, Trifluralin (used on oil seed crops), has been testing at 30% carryover on a number of fields instead of the anticipated 15% maximum amount. This elevated quantity of chemical can render a field unable to support a grain crop, such as wheat, for this year. There could, therefore, be a failure to practice sensible crop rotations if the succeeding crop neither sprouts nor grows properly in the "poisoned" soil. Further, there is a general elevation in the amount of nitrogen (64% above average) on stubble fields. This is partly due to record levels of nitrogen fertilizer (248 tonnes of actual nitrogen) having been applied throughout the province last year. Secondly, soil temperatures were also consistently elevated creating conditions conducive to the change of organic nitrogen to the plant-available form. These two factors coupled with a provincial average yield reduction to about half of what was targeted has left residual fertilizer for the 1989 crop.

There would seem to be considerable rumour and secrecy surrounding the implications of the May 4th signing of an agreement to sell Manfor to Repap Enterprises. A waferboard plant planned for Swan River was almost a reality earlier this year until the sale was originally announced. With Repap's cutting rights reported to extend over about one fifth of the entire province and apparently including portions of the Duck Mountains, where the aspen was to originate for the waferboard plant, the independent Swan River enterprise has been shelved. It is hoped that the sale to Repap is, at this stage, nothing beyond a simple transfer of ownership as no environmental impact assessments nor public hearings have been slated to examine the effects of augmenting both cutting amounts and areas. Nothing with respect to reforestation requirements has, so far, been announced nor has there been any intent noted to upgrade the physical plant to permit its utilization of recycled paper to displace portions of virgin pulp.

Barry R. Wild, Regional Chair

PEMBINA VALLEY

Manitoba Hazardous Waste Corporation

Early in the year the Manitoba Hazardous Waste Corporation held open house meetings in the Pembina Valley. As a consequence, the R.M. of Dufferin and the Town of Carman invited the Corporation to the community for an open house presentation and to a public meeting. The community and the municipal corporation did not proceed to establish an advisory committee on site selection, however, the councils and the representation of the corporation must be commended as the open house sessions and the public meeting prompted considerable discussion within the community and created a great awareness of the hazardous goods within the community, the need to protect our environment from hazardous goods, the need to eliminate hazardous goods in a safe and orderly manner, the need to assure that industry is not only monitored regularly but that monitoring devices are installed to protect the environment from greater pollution, and the need to handle chemicals in a safer manner to not only protect the environment, but to protect the health of the user.

Water

With the lack of precipitation in the Pembina Valley in the past several years, and in particular the drought conditions of 1988 and 1989, not only has the farming community become very concerned about the ability to produce crops and to water livestock, but the rural towns have become very concerned about a stable supply of water. In fact, with the depletion of supply of underground water, many shallow wells that have been in use for many years dried up, and farmers were forced to dig dugouts or haul water considerable distances. The consequence was that municipalities sought sources of underground water and in some instances were able to establish bulk water loading

facilities in the municipalities. However, many farmers secured additional supplies from the rural town which resulted in 9,000,000 gallons of bulk water sales by the Town of Carman in 1988, in spite of the fact that the source of water at the Stephenfield Dam was at the lowest level since construction.

In addition, the Town of Winkler and the Town of Morden face serious problems and it is quite evident that with the dwindling supply of water in storage west of the dam at Morden, and the reliance of the Town of Winkler on the Winkler Aquifer, which is also being depleted, that it will become absolutely essential to find alternate sources of water in the near future.

The consequence of the serious shortage of water in the Pembina Valley has resulted in: the farmers leaving stubble to prevent spring runoffs and to conserve moisture; the farming community looking at other sources of water; the announcement by the Government to raise the Stephenfield Dam approximately two feet; and the formation of a Water Task Force to determine the best means to assure supply to the communities of the Pembina Valley, as with below normal precipitation the next couple of years could be disastrous.

Conservation

Due to drought conditions many farmers and municipalities have become involved in the establishment of small dam and shelterbelt projects in order to conserve water and to protect the land from wind erosion. Shelterbelt projects have become prominent in the Deerwood area and in the municipalities of Dufferin, Stanley, Grey and MacDonald. These projects are welcomed and more farmers are showing interest.In fact, as the shelterbelts become more visible and the benefits become noticed, it is anticipated that there will be a greater demand for shelterbelts in the future as the shelterbelts not only conserve moisture and prevent wind erosion, but provide a habitat for birds and small animals.

Wildlife

With the increased production of corn, the deer population has increased as the corn fields become an excellent habitat in the winter months.

At the Stephenfield Lake, due to local interest in the Canada Goose, a small sanctuary has been established and some farmers have even expressed an interest in the permanency of sloughs, not only to provide a habitat for ducks, but for other species of wildlife.

Weeds

With the advent of the combine, weeds have been scattered over large areas of land. The consequence is that many municipalities have created weed districts and adopted a road allowance spraying program. In recent years in the Pembina Valley, milkweed, leafy spurge and kochia have become a problem. The result has been spot spraying by many municipalities to eliminate the milkweed, a combination of mowing and blanket spraying to eliminate other noxious weeds, and the use of insects to control leafy spurge.

Issue of Burning

Many farmers are opposed to the burning of road allowances and this practice has become practically nonexistent in many areas of the Pembina Valley, as many farmers oppose the destruction of a natural habitat for many small animals and birds.

Farmers share the concern of everyone over the burning of residue straw behind the combine. Legislation, licensing and enforcement to address the burning issue may result; however, the value of straw to the land should warrant greater emphasis on an education process to solve the problem, rather than legislation. As a consequence, Municipal officials enthusiastically supported this following resolution at the annual convention in 1989:

> "WHEREAS the practice of burning stubble, straw and other crop residue compromises the quality of the soil by

(a) reducing the organic levels; (b) reducing permeability, and (c) making soil susceptible to erosion;

AND WHEREAS irresponsible burning often creates serious road visability hazards, has harmful health implications for people in farm and non-farm communities, and destroys wildlife habitat;

NOW THEREFORE BE IT RESOLVED that the Union of Manitoba Municipalities request Manitoba Agriculture to take a more active role in providing educational materials respecting the damaging effects of burning rather than having restrictive legislative control imposed."

In many areas of the Pembina Valley there is little, if any, burning; however, dirty flax straw creates problems and burning may occasionally be an evil necessity.

Bill Roth, Regional Chair

NORTHERN # 1

During the year under report, Manitoba north of 53° was divided into three areas. Northern #1, more frequently referred to as North Western Region, roughly covers The Pas and its' trading communities of the Local Government District of Consol, the Opasquia farming area, Rails Island, Batchelar Sub Division, Youngs Point, Umpherville Settlement, Wanless, Cranberry Portage, Flin Flon, Sherridon and Snow Lake. The remainder of the trading area includes, Clearwater Lake Provincial Park, Cormorant, Moose Lake, Easterville.

During the year the following matters have been brought to my attention as public concerns to the environment:

1. The proposed nuclear plant north east of Prince Albert, Saskatchewan.

2. The disposal of saline water into Namue Lake and area by the mine at that location.

3. The use of herbicides for weed and brush removal on highway rights-of-way, power lines and rail roads.

4. The need to reduce the use of salt and seek a better alternative on our highways.

5. The need for hazardous waste disposal sites.

6. The need for more and better enforcement of acts relating to the environment, provincial parks and wildlife.

7. The reduction in enforcement staff and its demoralizing effects.

8. The need for a source of water, alternate to the Saskatchewan River, to supply the Town of The Pas, The Pas Indian Reserve and the Local Government District of Consol.

9. The assurance that surface mining development be kept off the Clearwater Lake Watershed.

10. The need for legislation and enforcement of the High Quality Designation of Clearwater Lake.

11. The need for an environmental assessment study relative to the sale of Manfor to Repap.

The city of Flin Flon has organized an environmental group for their area to work in cooperation with Hudson Bay Mining and Smelting to find ways and means to modernize their smelting and mining operations and reduce environmental concerns of the city and surrounding area. I have been invited to attend their meetings and will do so whenever possible.

The shortage of funding for legitimate expenses for board and committee members from outside Winnipeg to attend meetings is making the Manitoba Environmental Council a City of Winnipeg Council and does not encourage involvement of the rest of the Province. (Two thirds of our province lies North 53° and Manitoba is only one fifth arable land.)

I would like to thank the executive of our Environmental Council and especially Rory Grewar, our coordinator, for the help and assistance given throughout the year. Volunteers and employees of this nature are not easy to come by.

E.B Johanson, Regional Chair

NORTHERN # 2

My activities as Northern # 2 (North Central) Regional Chair have centred on responding to, and reporting on, a series of natural and man made environmental issues. The following points indicate areas which have received particular attention over the past twelve months.

1) Prepared report/letter regarding mis-use of C.F.C's by local industry. (Forwarded to the Provincial Environment Minister)

2) Raised concern over the use of used oil for dust control on roads in northern communities. (Identifying the need for recycling.)

3) Attended Clean Environment Commission Hearings, held in Thompson, to consider sewage treatment and discharge into the Bruntwood river. (Bruntwood now considered to be a secondary recreation use area north of Bruntwood bridge).

4) Reported on the progress towards recycling of glass bottles, and aluminum cans collected in the North and shipped south for processing.

5) Reported concerns to Environmental Chemicals Committee regarding the spraying of right-of-ways on provincial roads and railroads.

6) Attended conference on Acid Rain Policy in Denver, Colorado, with Jack Dubois and Brian Pannel. Networking with people from across Canada and the U.S.A. on the effects of acid rain in North America proved to be both interesting and informative.

Ken Lacroix, Regional Chair

NORTHERN #3

In the past year the federal government has announced a proposal to establish a park on Cape Churchill. Cape Churchill is a coastal area bordered by Hudson Bay between the Churchill and Nelson Rivers.

Although the proposal has been announced, no community meetings have been sponsored by the Parks Branch. The community is concerned about the pros and cons of establishing a park. Local land use patterns must be given preferential consideration although there is strong support for the community's role in promoting northern environmental awareness through tourism. There is support for the special status of the Churchill rail line and its promotion of low cost access to Manitoba's unique coastal area. The management of a sustainable tourism industry and the promotion of Manitoba's unique contribution to northern environmental awareness may require an equally unique regional transportation policy.

The presence of polar bears in Cape Churchill is one primary tourist attraction. There are concerns that polar bear viewing be developed further as a sustainable activity based upon the well being of the local polar bear population and human safety. In the past year there have not been major problems associated with polar bear viewing but local residents have noted a possible decrease in polar bear numbers in their formerly preferred habitat. Further study appears warranted.

We appreciate the northern support and perspectives developed by M.E.C. committees resulting in briefs on water policy and hydro electric development.

There is regional concern about the provinces perspective on northern water resources. As today's brief on water policy indicated, the large Hudson Bay drainage area has received a low level of attention when compared to southern areas. Local concern centres on the complete devastation of huge areas as a result of hydro-electric projects. The massive diversion of the Churchill River and its effects are a well kept provincial secret. The areas affected are larger than some

Canadian provinces. Notably these policies and projects were not detailed in the workbook on water produced by the province. The Seal and the Hayes Rivers may now be under consideration for hydro-electric development. The initiatives described by the Energy Committee today are welcomed.

The Tundra-Coastal (Northern #3) Region of the M.E.C. has raised the financial support required for a study on habitat use and function in the coastal region. The proposed report, for which we seek endorsement, would involve a summer student and;

1) review our understanding of wildlife habitat use and function within the Tundra-Coastal region including the taiga and boreal habitat;

2) review the economics of the region associated with human habitat use and;

3) delineate further directions for determining required environmental research to promote sustainable development.

The proposed submission date for the report is April 1990.

Paul Watts, Regional Chair

WESTERN

No Report

Chris Macdonald, Regional Chair

WINNIPEG

In the past year Winnipeg has had spills in the environment that have been accidental - transportation related spills. There have, as usual, been more deliberate ones. The major scare in the Maples due to illegal dumping, has led to a tightening up of regulations regarding discharges into the sewer system, a restriction of dump sites and more monitoring and spot checks. We hope that the completion of the Hazardous Waste Disposal site will encourage these transgressers to use the facility rather than illegally dumping their wastes.

The Omand Creek battle having been fought before and won, it seems time after time, has again been resurrected. Now a proposed car wash on the creek would compromise the area. Bluestem Park should be extended to include this area of proposed development and as much of the Creek area as possible. This development is apparently still on hold at City Council. We hope that the park area will be extended.

Lead in drinking water in schools has apparently been solved.

Recycling will be attempted in the Wolsley area this summer. We hope this method of dealing with garbage will be successful.

The Winnipeg members of Council thank the rural representatives for their vigilance in the vast part of Manitoba they watch and cherish to the benefit of the total population of the province.

Betty Pawlicki, Regional Chair

BRIEFS

PRESENTATION TO THE CLEAN ENVIRONMENT COMMISSION CONCERNING THE APPLICATION BY CANAMAX RESOURCES LIMITED, OCTOBER 27, 1988

Mr. Chairman, Commissioners:

We welcome this opportunity to comment on the first Class III application under the new Manitoba Environment Act. Because of the historic nature of this application, we shall be dealing not only with the proposed project itself, but also with the Environmental Impact Assessment Review (E.I.A.R.) process as applied, in the hope that the weaknesses here can be eliminated or reduced in future cases.

I. GENERAL AND PROCEDURAL CONCERNS

A. Timing of Approval

Perhaps the most disturbing aspect of the way this application has been processed is the

granting of approval in principle before any opportunity for evaluation of, and comment on, the environmental impacts of the project by either the Manitoba Environmental Council or the public. It is fundamental to any good environmental planning or E.I.A.R. process that the environmental impacts be evaluated before approval of the project. If the government is serious about developing a provincial conservation and sustainable development strategy, this principle must be applied to all new projects and programmes. For any major ones such as this, there should also be an opportunity for independent evaluation of the impact study by the Manitoba Environmental Council and, where possible, by the public, prior to approval, even in principle. If, as in this case, the comments of Council and the public are to be effectively limited to suggesting ways of mitigating potential impacts, this is a signal that the government's thinking on this matter has not advanced beyond that of its predecessors. Our first recommendation is then:

1) that, in future Class III applications under the Environment Act, an opportunity for input by the Manitoba Environmental Council and public hearings be provided before approval in principle of the development.

B. Stages and the Scope of the Public Hearings.

The question of what are the "stages" of this project and its license application has been a source of confusion throughout the process. As far as we can tell, there is little or no correspondence between the stages identified in the Manitoba Potash study, those identified in the Department's announcement of the application, and those in the recently-issued "Stage 1 License". Although stages in the evaluation process may be useful — it is reasonable to expect that a preliminary Environmental Impact Assessment (E.I.A.) prior to a go/no go decision would not be undertaken to the same depth or expense as a final one (prior to construction) — they should be clarified and standardized as much as possible. In general, it would be at the earliest stages where general public input would seem to be most important, and at later stages (after approval of the project) that specialist and expert opinion (such as that available in the Department) would be most valuable. This is much too complex a question to work out in the present context, so we recommend:

2) that a committee be established to include at least one representative each of the Department, the Council, and the Commission, to establish a general procedure with respect to scope of stages in environmental assessment and licensing, including identification of points where opportunity for public input should be provided.

C. Publicity and Effectiveness of Public Registry

The problems of relying entirely on one day's newspaper advertising to alert all concerned citizens and groups that an application is being considered became apparent last spring. One alert observer happened to see the ad and contacted others, none of whom had caught it, or there might well have been no requests for public hearings. Since the registry summaries go out only about once a month, and the deadline for input is often less than a month, they are not adequate for the purpose of informing concerned groups, although they help. The relative inaccessibility of the main Public Registry because of its limited open hours also greatly reduces the opportunity for public input. It must be kept in mind that public-interest groups, including the Council, depend to a large extent on volunteers, who must seek the information and prepare briefs outside of their regular working hours, and who may not have the time to monitor the news media daily. Also it is a reality that in Manitoba most environmental organizations are based in Winnipeg, and so can rarely benefit from the other regional Public Registries. Therefore we recommend:

3) (a) that whenever possible at least six (6) weeks be provided for public input on applications where there is a possibility that no public hearings will be held, and (b) that, in addition to the monthly registry update, Chairs of the Council, of the Commission, of the Manitoba Environmental Network, and any other environmental groups that so

request, be supplied automatically and immediately (by mail) with notice of any applications for Class III developments, and (c) that full details of ALL Class II and III projects (not just those of the Winnipeg Region) be maintained in the sub-registry at the Winnipeg Centennial Library, with the Department covering any additional costs to the Library.

D. Timing and Notice for Public Input

It should be evident that, to a certain point, there is going to be a direct relationship between the time available for public input and its quality and quantity. What this point is could be argued in any case, but surely most would agree that the two (2) weeks allowed here between the Notice of Hearings and the hearings themselves is not enough time for volunteers working in their spare time to analyze a study of this size, to prepare reasoned comments on it, and to get them revised, approved, and typed for presentation. Although this minimum time-line might be justified in some emergency case, what is the rush here? As far as we can tell the world is not clamoring for Manitoba potash, and it seems unlikely that, even if a stage II license were granted today, anything would happen in the next 6-8 months. We recommend:

4) that at least six (6) weeks be provided, except in situations of urgency, between the date a public hearing is called concerning an E.I.A.R and the date it is held.

II. GENERAL COMMENTS RE: THE MANITOBA POTASH PROJECT E.I.A.

A. Relevance of This Study to This Stage.

We had some difficulty understanding the exact intent of this environmental study. As outlined in its section 3.3 (pages 3-11 to 3-14) it appears to have been the portion of the E.I.A. to have been completed prior to project approval, and further "Phase III studies will be initiated to review and refine the scope of project impacts and to identify and develop mitigation and enhancement strategies", as well as "studies to gather and analyze baseline biophysical data..." and "further heritage resource field studies... will be conducted prior to any construction." This seems reasonable to us, but it would logically follow that such studies and a construction plan based on them should be available before a license for construction is issued, and, indeed, before this public hearing is held. That seems to have been the original intent as shown by Figure 3.1, but somewhere it went off the rails.

Since most of the biological baseline data would have to be obtained in the early summer, it would seem that the logical course of action would be to adjourn this hearing and re-convene it next summer or autumn, when the necessary studies and planning would have been done, to permit adequate assessment of the impacts of construction to identify any restrictions that might need to be attached to the license. Our recommendation is:

5) that no license for construction be issued until these studies have been done and the resulting plan made available for public comment.

B. General Strengths and Weaknesses of Study

It seems to us that the proponents have addressed the issues outlined in tables 3.1 and 3.2, some of them in more detail than might have been required for a preliminary E.I.A. In particular, there seems to have been considerable effort in the areas related directly to control of air-borne and water-borne emissions.

The major weakness is to some extent the converse. There has been no attempt to identify or map the ecosystems of the area, much less to identify the impacts on ecosystems. The single paragraph (page 5-15) devoted to describing the native vegetation of the area, in a study of more than 175 pages, symbolizes the inadequacy of this aspect of the E.I.A. Likewise, non-game animal species are almost totally ignored.

Although we have not seen the original Study Plan, if it is reflected faithfully by tables 3.1 and 3.2, it appears to have been at the root of this problem. This is not necessarily to criticize either the proponent, the consultant, or the Technical Advisory

Committee (TAC) that prepared the Study Plan, for they were working under the old Act where environmental protection was equated with pollution control. It is to be hoped that the thinking of governmental personnel has evolved with the Act and that they now recognize the need for the ecosystem approach. We also note with dismay that the list of members of the TAC in Appendix A appears to include no ecologists or field biologists. We recommend, therefore:

6) that one or more ecologists or field biologists be added to the Technical Advisory Committee, and that the guidelines for the second (pre-construction) phase of the E.I.A. be based on the ecosystem approach.

We also note that although socio-economic effects of both construction and operation are given, that environmental impacts deal almost entirely with those of operation, ignoring those of construction. This is perhaps a result of the preliminary nature of the E.I.A., and should be overcome by the additional studies and analysis noted in II A.

Perhaps resulting from the same situation is the absence of a topographic plan or map of the site, and the near-absence of reference to or description of the area's landforms. One major drainage to the south-southeast shown on topographic maps of the area (NTS series) is omitted from the site map (Figure 4.5) although it seems to be closer to the proposed tailings and brine pond areas than the small drainage to the east shown. Why?

One other general point is relevant at this stage of the assessment. The 1981 census data cited (page 5-16) indicating that only 1.5% of the lands of the R.M. of Russell were classified as woodland (along with marshes and sloughs the most important areas to wildlife) is somewhat misleading, as is the comment (page 2-10) that "only a few aspen trees exist within a 2.5 km radius of the ... mill site." Although we lack that ecosystem map needed to give the accurate figures, a cursory visual survey showed numerous and significant aspen stands in the area of the site, apparently a much greater proportion of the cover than the 1.5% for the R.M. as a whole.

III. SPECIFIC COMMENTS ON ASPECTS OF THE PROJECT

A. Timing

Although approval-in-principle has already been granted in the absence of a provincial Conservation and Sustainable Development Strategy, the question of timing of construction and operation of the project is still open. Even though development of such a strategy is barely beginning in Manitoba, we hope that some consideration will be given to how this will fit into such an overall strategy, including indirect impacts such as possible alternative use of the investment funds needed (especially if there is any government subsidization of the project, direct or indirect) or the environmental impact (positive or negative) of use of the products of the mine now or, say, 10 years from now. These are difficult and complex questions, perhaps beyond the scope of these hearings, but there needs to be an effort to consciously address them at some stage of the planning, not only of this project, but for any major development.

B. Observations re: Construction Impacts

In general, because of the greater areas involved and, therefore, the greater extent of ecosystems to be disturbed, environmental impacts of road, rail and other corridors to the site are likely to be greater than those of construction of the mine site itself. Unfortunately the routes of the two longest corridors — the CN spur and the 230 kV electric transmission line — are not even identified in the environmental study. Of the corridors on the site map (Figure 4.5), those having the greatest potential impact on natural ecosystems are the natural gas supply line and (to a lesser extent) the water intake line from the Assiniboine River and the relocation of grid road PR 579. Here, as well as at the actual sites of the buildings, tailings area and brine ponds, there should be on-site examination by a biologist of the existing ecosystems to determine the potential impacts, and in particular, to check for the possible occurrence of threatened or rare species of plants or animals in the affected areas. The actual route selections for the longer corridors (gas, hydro, and the CN spur)

should be determined to a large extent on the basis of minimizing environmental impact. Without pre-judging the results of such an analysis, it would seem to be likely that the gas pipeline would have much less impact if it followed the highway across the river valley and headed south at some point farther west, rather than as shown on Figure 4.5. In general the wooded slopes of the steep valley sides, along with potholes and sloughs that contribute to the region's reputation as the "duck factory" of North America, are likely to be the most important and sensitive natural ecosystems to be affected and should receive particular attention.

C. Observations on Operational Impacts

In general, more information is provided on these, and the planning to minimize them is much better developed than for the construction impacts. Although we hope and expect that another opportunity for public input will be provided prior to issuance of the Stage 3 license, and subsequent to the more detailed environmental studies to be undertaken, a few questions come immediately to mind.

1. What are the bases of the suspended particulate and particulate deposition standards used, and is the former adequate in light of our increasing awareness of the effects of atmospheric pollution?
2. If the "tailings storage" is to be used as "tailings disposal", who will be paying for its maintenance after the closure of the mine?
3. In a dry year such as this would the anticipated "crust" on the tailings pile still form and prevent wind erosion of it?
4. Is "clay till" completely impermeable? (What percent of the till is clay?)
5. On the socio-economic side, the increased use of Assessippi Provincial Park would exacerbate an existing problem of dust deposition from use of the access road there. Is paving this road recognized as a necessary expense, partly related to the project?

We could go on, and can provide additional questions on request, but at this stage it would probably be more productive to leave them until we have had more time to analyze this and related studies, and to see the relation to the ecological data yet to be obtained.

IV. CONCLUSION

From the review of this Environmental Impact Assessment, it seems likely that the major impacts could be reduced to levels that could be acceptable if balanced against clear benefits that might be demonstrated. Since approval in principle has already been granted, this question is, of course, academic.

Our main task now is to ensure that negative impacts are minimized, and clearly further detailed studies and planning, with emphasis on the ecosystems affected, are the key to success here.

STATEMENT TO THE CLEAN ENVIRONMENT COMMISSION HEARINGS NOVEMBER 7th & 8th 1988 CLEARWATER LAKE "HIGH QUALITY" WATER DESIGNATION

The Manitoba Environmental Council concurs with the "High Quality Water" designation proposed for Clearwater Lake, and the importance of protecting the quality of this water resource for the residents of The Pas and surrounding areas.

FORESTRY AND REFORESTATION IN MANITOBA

RECOMMENDATIONS

The Manitoba Environmental Council recommends to the Minister that he and his colleague, the Minister of Natural Resources ensure that the following actions are taken with regard to the forest industry in Manitoba.

a) Develop and publish reforestation standards for Manitoba, following public hearings on this subject held in several centres in Manitoba. These reforestation standards should:

i) embody the principles of the World Conservation Strategy and of sustainable development;

ii) provide for a balance between re-establishment of the forest ecosystem and provision of future wood supply;

iii) take into account site-to-site differences in ecological conditions;

iv) provide for continuous evaluation of reforestation effectiveness at appropriate intervals over the life of the stand;

v) provide for multiple use of the regenerating areas.

Reforestation standards should be updated periodically as new research results become available.

b) Ensure that an adequate level of both short and long-term research is conducted either by the province, preferably in conjunction with the Canadian Forestry Service, universities and/or industry on ecological effects of various logging practices and on reforestation methods, particularly those involving the use of chemical or mechanical technologies. Particular new effort should be devoted to research on drainage of wetlands before this practice is seriously considered for use in silviculture in Manitoba. Furthermore, scientific effort should be devoted to assessing/predicting the effects of various climate change scenarios on forest ecosystems in Manitoba.

c) Vigorously pursue renewal of the federal-provincial Forestry Economic and Regional Development Agreement which expires on 31 March 1989. A new agreement should include an explicit mechanism for coordinating forestry activities with those of other natural resource sectors and concerns, e.g. wildlife management, soil conservation, wetlands conservation, fisheries, parks, ecological reserves, recreation and wilderness preservation.

d) as provided for under the Manitoba Environment Act at the time of approval of 'developments', hold public hearings before renewing major forestry leases and approving 5-year cutting plans.

BACKGROUND

Forestry in Manitoba is a significant economic sector providing jobs in logging, saw-mill operation, pulp and paper mill operation as well as a range of indirect jobs. Wood supply shortages in Manitoba threaten to curtail realization of economic opportunities in Manitoba's forest products industry.

Reforestation and silviculture are highly significant activities in restoring logged or burned forested areas where natural regeneration is slow and in ensuring future wood supplies. Reforestation is more than planting seeds or seedlings. It involves choice of seed stock, the possibilities of genetic selection and of genetic engineering, containerism vs bareroot planting, the nature of the site preparation, herbicide use vs manual competitor control, fertilization, chemical analysis of seedings for nutrient deficiencies, on-site monitoring of seedling growth and wood quality, thinning, control of species permitted to grow, control of forest fire, ecological study of regenerating forests produced by various silviculture methods, implications for wildlife and fisheries and multiple use. Given the enormous range of possibilities for forestry practices to be ecologically-damaging and non-sustained on the one hand and sustained or improving on the other hand, there has been surprisingly little research on the technical and ecological aspects of forestry and reforestation practices in Manitoba. Much of the research from other localities is not applicable to the black spruce climax, wetland-dominated, fire-dominated communities. It is extremely important that the Federal-Provincial Forest Agreement be renewed so that there is no interruption in research and tree planting underway.

More than one-half of the province of Manitoba lies on Precambrian Shield on which peat bogs are common. "Controlling

groundwater table levels through drainage for the purpose of increasing wood production is a fairly new forest management technique in Canada" (Hillman, 1987). Drainage of wetlands has been practiced extensively on peatlands in Finland and is associated with increased acidity of the runoff from these areas. This phenomenon of increased acidity is poorly documented in the scientific literature. Experimental drainage in Canada has apparently not been carried on long enough nor with monitoring of downstream pH effects for the long-term effects in Canada to be known. The drainage and associated mechanical disruption of the peat is an extreme perturbation of the peat community. The ecology and ecological role of peatlands in Manitoba need to be much better understood before we can judge the relative benefits of peatland integrity vs peatland drainage and understand ways of minimizing impacts on wetlands that are drained for increased wood production.

Prepared for presentation on 3 December 1988 at the Semi-Annual Meeting by an Ad Hoc Committee (D. Malley, K. Lacroix, C. MacDonald, D. Punter).

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PROCESSING OF WASTES IN MANITOBA'S SMELTERS

RECOMMENDATIONS

The Manitoba Environmental Council recommends to the Minister that:

a) the public be informed of the Departmental process to be followed by the smelting industry in Manitoba when it proposes any changes in the nature of materials to be smelted;

b) prior to approval of any changes in the nature of materials entering the smelters, all projected emissions other than those covered by present Regulation be fully identified and subject to Regulation which provides for (i) limits to emissions of each major chemical component and (ii) monitoring of emissions (e.g. stack-sampling) and air quality in the vicinity of the smelter;

c) the potential role of smelters in Manitoba in the reclamation and recycling of metals from metal-bearing wastes be studied by the Department and the Manitoba Hazardous Waste Management Corporation considering both economic and environmental advisability.

BACKGROUND

During the past year or two the two major smelters in Manitoba have considered the introduction or have introduced materials other than natural ore into the smelter, e.g. incinerated (at 800°C) sewage waste from Palo Alto, California, waste products from Silicon Valley, and on-site tailings from past

activities for the purpose of reclaiming metals. Regulation 165-88 concerning atmospheric emissions from the two major smelters in Manitoba controls only SO_2 and metal-bearing particulates resulting from the smelting of inorganic ore. Wastes, particularly if they include manufactured articles, can contain organic compounds. Burning of domestic wastes is well known to produce organic compounds not originally present such as polyaromatic hydrocarbons (PAH), polychlorinated dibenzodioxins (PCDD) and polychlorinated dibenzofurans (PCDF) (Bumb et al, 1980; Bjorseth & Olufsen, 1983; Czuczwa et al, 1985). For example, burning of polyvinyl chloride plastics, which contain chloride, may cause the emission of PCDDs.

Wastes selected to enter smelters should be maintained relatively consistent in composition and be chemically-characterized, e.g. concentration of organic carbon, concentration of lipid. Types of organic emissions arising should be predicted knowing the rough chemical composition of the waste and the operating temperature of the smelter. Temperatures of 600 to 800°C produce PCDD's, whereas, temperatures greater, than 1000°C destroy any PCDD or PCDFs produced. At the Inco Ltd., Thompson Smelter, the temperature in the roaster is 562-612°C (Orr and Warner, 1974). It is at this stage that atmospheric emissions originate. The temperature of the furnace is higher, at 1120°C (Aldag et al, 1977).

Many of the organic emissions (PAH, PCDD, PCDF) adsorb to fly ash. Highly efficient trapping of fly ash would prevent most of the organic as well as most metal emissions from reaching the environment.

If wastes were added to smelters, considerably more intensive and expensive monitoring systems would have to be put in place than is presently the case. The fly ash would be sampled for its content of PAH, PCDD's and PCDF's. To ensure environmental protection, atmospheric sampling (high volume air sampling) downwind of the smelter and precipitation event sampling should be carried out. Chemical analysis of proposed wastes and the fly ash, precipitation and air samples from monitoring could presumably be handled in the same manner as samples arising from operation of Manitoba's hazardous waste facility.

The long-range transport of acid-producing air pollutants and resulting acid rain have received a great deal of attention over the past decade. Considerable effort has been made to understand and control the problem. Even more mobile in the atmosphere than the acid precursors are many organic compounds originating from pesticide use, combustion, industrial activities and emissions. Organic contaminants have been measured in fish flesh, in tissues of marine mammals, in precipitation and in soil and sediments in areas both near to and remote from industrial centres. Atmospheric inputs of organic pollutants to aquatic environments have come to be recognized by scientists as the major pathway of organic contamination of the Great Lakes, the Canadian arctic, the New England states, Switzerland and Scandanavia. The full extent of contamination from and effects of organic contaminants on aquatic systems, on farm land and on terrestrial animals and humans are not well known. Some contaminants are known carcinogens and incidences of cancer, particularly in fish, are documented.

The concern in Manitoba is to plan and conduct new activities such as reclamation and recycling of metals while minimizing the possibility of exchanging one waste (solid) for others (gaseous and particulate).

Prepared for presentation on 3 December 1988 at the Semi-Annual Meeting by an Ad Hoc Committee (D. Malley, K. Lacroix, C. McDonald, D. Muir).

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PUBLIC EXAMINATION OF THE EFFECTS ON MANITOBA OF THE RAFFERTY/ ALAMEDA DAMS PROJECT IN SASKATCHEWAN

RECOMMENDATIONS

The Manitoba Environmental Council recommends to the Minister that he, alone or in conjunction with his colleague, the Minister of Natural Resources:

a) conduct full public hearings by the Clean Environment Commission on the implications for Manitoba of the Rafferty/Alameda Dams Project in Saskatchewan to provide Manitobans with an opportunity for public scrutiny of:

   i) the environmental impacts of the project on the water quantity and quality of the Souris River entering Manitoba from North Dakota projected by the Souris River Basin Development Authority and the U.S. Army Corps of Engineers;

   ii) the conclusions and recommendations on the Project based on study by the Manitoba Interdepartmental Committee;

   iii) the implications of various climate change scenarios for central North America on the projections for water quantity and quality in the Souris River Basin with and without the Rafferty/ Alameda Dams Project;

   iv) the provisions for monitoring the water quantity and quality of the Souris River in Manitoba during the period of reservoir filling and during the subsequent operation of the Project;

   v) the water quality objectives for the Souris River at the Manitoba/ North Dakota border;

   vi) the proposed post-Project management structure and mechanisms;

   vii) the nature of corrective actions which could be taken by North Dakota if the water quantity and quality at the Manitoba/North Dakota border do not comply with the final agreement and the schedule of compensations.

b) include the recommendations from the public hearing process in Manitoba's position during the negotiations of the Canada/U.S. Agreement

c) call for a study of the Project by the Federal Environmental Assessment and Review Office and/or a reference to the International Joint Commission if this is required to obtain a high quality scientific assessment of the implications of climate change or if recommended by the Clean Environment Commission following the public hearings.

BACKGROUND

The Souris River Basin is situated within Saskatchewan, North Dakota and Manitoba.

The Rafferty/Alameda Dams Project on the Souris River and a tributary, the Moose Mountain Creek, is confined to Saskatchewan but alters the regime of the Souris River which flows into North Dakota and subsequently into Manitoba. Since the government of Saskatchewan announced the Project in February, 1986, that province has conducted an environmental impact assessment under its Environmental Assessment Act, with a period of public review of the E.I.S. followed by public hearings. The Saskatchewan assessment was confined to impacts on that province. The U.S. has engaged in an environmental assessment process involving the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the North Dakota State Water Commission, the North Dakota State Health Department and the U.S. Environmental Protection Agency. The U.S. process included entering the E.I.S. draft into the public registry followed by permitting a 60-day period for the public to raise questions. An international agreement is required to allow for the flow of U.S. funds to Saskatchewan (for flood control in North Dakota); provide for an operating plan in the Souris River Basin and ensure flood protection; provide for certain measures relating to water quality; provide for compensation to Manitoba should damage occur; and generally to allow for cooperative water management in the Souris River Basin.

Manitoba's response to date on environmental implications of the Project has been a study by an Interdepartmental Committee drawn from the Department of Environment and Workplace Safety and Health, Department of Natural Resources and the Executive Council and consultation with Environment Canada, the province of Saskatchewan, the state of North Dakota and the U.S. federal agencies. The conclusions and recommendations reached by the Committee are presented in a report, "The Rafferty/Alameda Dams Project Implications for Manitoba".

Thus, to date there has been no opportunity for public scrutiny of and public input on the Project such as has been extended to the people of Saskatchewan and North Dakota.

Nineteen municipal corporations occur along the Souris River in Manitoba. Public input by Manitobans is important not only for the democratic process, but also to diminish public objections later of project impacts, monitoring, water quality guidelines, mitigation and/or compensation. Perhaps most importantly, however, it would permit the project to be examined in the light of present scientific knowledge that some degree of climate warming is in process. Predictions about water flows into Manitoba are based on "a hydrologic period similar to the 63 year period from 1912 to 1974". This assumption must be critically examined and the implications of departure of reality from it considered.

Manitoba has achieved an enviable reputation as a leader in sustainable development in Canada and the world with its stimulation of the National Task Force on Environment and Economy in 1987 and more recently, by being named the site of an international Sustainable Development Centre for Canada. One of the most basic tenets of sustainable development is "anticipate and prevent". It is not only feasible, but also extremely important, that Manitoba take a leadership role in bringing this principal of "anticipate and prevent" to major water developments in Canada, including the Rafferty/Alameda Project. This should be done by examining the implications of climate change on the Project's impacts on Manitoba, by incorporating climate change uncertainties into the Canada/U.S. agreement and by rejecting monitoring, mitigation and compensation as the primary avenues for Manitoba's response to the Project.
On 17 June 1988 the federal Minister of Environment granted a license under the International River Improvements Act to Saskatchewan to construct, operate and maintain the Rafferty Dam on the Souris River and the Alameda Dam on Moose Mountain Creek. The license permits (but places limits on) diversions of water from outside the Souris River drainage basin. This licensing came before the U.S. E.P.A.'s review in September 1988 of the final E.I.S. The "E.P.A. recommends that all U.S. and international agreements required for the project be completed and signed before a

final commitment is made to the project". The license for construction came as well before the due date of 1 January 1990 for receipt by the government of Saskatchewan of:

1. "a detailed water management plan for the Souris Basin in Saskatchewan which shall include recommendations and proposals for the implementation of mitigative measures and environmental protection procedures";

2. "plans for mitigating any negative impacts the development might have on any rare, threatened or endangered species";and

3. a Fisheries Management Plan.

The processes used for assessing the environmental impacts, assessing the risk-benefit ratio, licensing for construction and operation and for reaching international agreement on this interprovincial, international and potentially interbasin water project have been chequered and of ineffective sequence to say the least. Coming as they do on the eve of national efforts in developing and implementing conservation or sustainable development strategies, the Project and the processes are indicative of our collective commitment towards those goals.

Prepared for Presentation at the 3 December 1988, Semi-Annual Meeting by an Ad Hoc Committee (D. Malley, C. McDonald, R. Howard)

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HYDRO-ELECTRIC DEVELOPMENT: ENVIRONMENTAL ASSESSMENT AND COMPENSATION ISSUES

RECOMMENDATIONS

The Energy Committee of the Manitoba Environmental Council recommends to the Minister that:

a) all future hydro-electric development in Manitoba proceeds only with proper environmental impact assessment including full disclosure of effects and meaningful consultation with affected parties;

b) the Manitoba Government adopt the "Proponent Pays Principle" and ensures that equitable and timely compensation is provided to affected parties;

c) the Manitoba Government ensures true benefit/cost justification of public projects by requiring all compensation and mitigation costs to be included in total development costs;

d) the Manitoba Government adopt a "Revenue Sharing" policy for formulating compensation and ensures that the Grand Rapids Forebay Bands and the Northern Flood Agreement Bands retroactively share in the revenues generated through the flooding of their Reserve lands;

e) instructions be given to the Manitoba Clean Environment Commission to hold

public hearings into Manitoba Hydro's future development plans to allow the people of Manitoba input into the major decision-making process.

BACKGROUND AND RATIONALE

The Government of Manitoba, through its wholly owned Crown Corporation Manitoba Hydro, has to date developed only a relatively small fraction of the hydro-electric potential of our northern rivers. In so doing, the associated environmental and social adverse effects have been in large measure borne by the aboriginal people resident along the affected waterways, whereas the benefits associated with abundant and relatively inexpensive electricity have accrued predominantly to southern Manitobans.

To date, two attempts have been made to structure compensation packages for the affected aboriginal people.

1. The 1962 "Letters of Intent" from the provincial government to the Pas, Chemawawin and Moose Lake Bands whose Reserve Lands were flooded by the Grand Rapids Dam. (The latter two Bands had to be completely relocated to new sites which turned out to be significantly less productive and poorly suited for community development. A fourth Band, the Grand Rapids Band, located immediately adjacent to the Grand Rapids Dam, received no compensation package because no Band Reserve land was flooded);

2. The Northern Flood Agreement (NFA) was signed in 1977 by Manitoba Hydro, Manitoba, Canada and the Northern Flood Committee representing the Norway House, Cross Lake, Nelson House, York Factory and Split Lake Bands whose Reserve lands were affected by the Lake Winnipeg Regulation and Churchill River Diversion Projects. (The NFA is a loosely worded, open-ended framework for compensation, mitigation and remedial measures. Over the NFA's 11 year history, few benefits have been provided to the Bands by Manitoba Hydro or the Government of Manitoba whereas consultants and lawyers have been the NFA's main beneficiaries. The parties are currently gearing up for a new round of negotiations aimed at implementing the Agreement and resolving the numerous associated claims, numbering 148 major and over 1700 smaller personnel claims.)

Both attempts at formulating compensation agreements have failed miserably. The reasons for the failure can be summarized by the following excerpt from the December 1979 Final Report by the Commission of Inquiry into Manitoba Hydro headed by Judge Tritchler.

1. "The Manitoba Government and Manitoba Hydro were unable or unwilling to recognize that it was necessary to communicate the effects of the project to the impacted people in an understandable way before meaningful negotiations could take place";

2. During negotiations, "the Manitoba Government acted as an advocate for Manitoba Hydro and thus was unable to fulfill a meaningful role on behalf of the citizens of Northern Manitoba affected by the activities of Hydro."

The Tritchler Commission also suggests that negotiations were further complicated by Manitoba Hydro's position that their responsibility is limited only to repair and/or replacement of facilities directly adversely affected by the project and that compensation for indirect adverse effects is the responsibility of Government.

In order to ensure that the past mistakes are never repeated, it is essential that environmental assessment is fully integrated into the planning process and therefore all compensation and mitigation costs must be identified as early in the process as possible and must be included in the total development costs. As such, the Project proponent must be made responsible for providing equitable and timely compensation to all affected parties. Fair compensation settlements for impacts on livelihood and

lifestyle should include aspects of royalties or revenue sharing.

Finally, Manitoba Hydro has a long term development plan that includes such projects as the Hayes River Diversion and a generating station on the Seal River. The Manitoba Government has recently denied the transfer of land along the Hayes River to a Northern Flood Agreement Band in exchange for flooded Reserve land under the terms of the Northern Flood Agreement. The reason provided for the denial was that Manitoba Hydro may require the land for future projects. The time has come for the people of Manitoba to have meaningful consultation with Manitoba Hydro regarding which rivers should not be included in any short and/or long range development plan.

MARY JANE RESERVOIR FISH SCREEN, FILE NO. 2972.00

BACKGROUND

Salt is a major contaminant associated with declining surface and ground water quality in southern Manitoba. At present much of the salt influx into our natural water resources has its origin as road salt. Road salt is already a serious problem in many other areas of Canada, particularly the Maritimes, where it has polluted both surface and well water (e.g. Groundwater Pollution Primer). Even large bodies of water, where dilution would be expected to be substantial, have undergone significant increases in salinity. The concentration of chloride in Lake Erie, for example, has increased by more than 300% in the last century as a result of road salting and municipal effluents (Ownbey and Kee, 1967).

In southern Manitoba, the problem of increasing salinity is particularly evident, for here it is compounded by the utilization of agricultural inorganic chemicals which contain sodium or chloride as part of their elemental composition. Being salts, these chemicals disassociate freely in water to yield the sodium or chloride ions. These remain strongly bound by water and will not precipitate into the bottom sediments unless the solution becomes supersaturated. In view of the very high solubility of sodium chloride in water (1 kg dissolves in 2.8 litres at 25°C), supersaturation is seen only in small water bodies that are subject to drying. Thus in most natural waters sodium chloride remains and circulates indefinitely once it has entered the system.

Salinization of waters in southern Manitoba has become particularly noticeable during the last few years as the scarcity of water in many localities has been aggravated by the drought and natural aquifers are being depleted. Thus at present in the Morden-Pembina River area one may encounter midsummer values of chloride in excess of 1200 mg/l in some ditches and dugouts (Pip, unpublished data). In comparison, the mean chloride for North American waters is 8 mg/l (Livingstone, 1963). Values in the Manitou-Darlingford vicinity are well above the latter level. Accordingly we should carefully consider any deliberate dumping of salt into a resource which is already stressed.

Salt concentrations are of great importance to aquatic organisms. Many freshwater species cannot tolerate even moderately elevated salt levels, and environments in Manitoba where chloride is present are associated with reduced diversity of macrophyte and invertebrate communities. Some organisms are sensitive to changes in chloride concentration of as little as 2 mg/l (Pip, 1987, 1988).

CONCERNS WITH RESPECT TO MARY JANE RESERVOIR

1. The projected increase in total dissolved solids of 1.11 mg/l as a result of the proposed salt application is misleading because it is well known that the Mary Jane Reservoir does not undergo complete mixing even at the spring and fall isothermic overturns due to the steep basin morphometry and the lack of large uninterrupted surface area relative to volume to allow for the development of a large fetch. These factors contribute towards the tendency of the Mary Jane Reservoir to stratify quickly after ice breakup and

for a substantial hypolimnion to stagnate in summer, where oxygen is depleted rapidly, leading in turn to fish mortality.

Accordingly, it is unrealistic to suppose that the added salt will become distributed uniformly throughout the volume of the basin. The salt will tend to pool near the area of application, where the increase in total dissolved solids may be many times greater than the overall mean expected increase. Such locally high concentration may be sufficient to damage fish food organisms that are not highly mobile and cannot migrate quickly to another part of the water body.

If ice breakup is followed by a few warm, calm days the salt may create a density gradient (chemocline) which would result in a pooling of the salt in the deepest part of the basin, where again its concentration would be much greater than if the salt mass were distributed evenly. An examination of the contour map of the Mary Jane Reservoir indicates that conditions favor the development of such a meromictic situation: notice that the greatest depths occur quite close to the area of application and the incline is steep would mean that the salt would not be subject to flushing during times of outflow due to the additional resistance imposed by the increased density. Concentrated near the bottom, the salt would aggravate anaerobic conditions and would make the present stagnation problem even worse. From a public health standpoint, anaerobic conditions in a domestic water source are a favorable environment for botulism.

According to Wetzel (1983), the concentration change need not be great in order for measurable resistance to mixing to occur; it can be less than 10 mg/l - such concentrations are easily possible with the above scenario. And of course, the bottom water layer where salinity is greater has a reduced capacity to dissolve oxygen even if the latter is made available through aeration (Weiss, 1970).

2. Water levels in the Mary Jane Reservoir may drop even further if the present drought persists. This would raise the projected overall mean increase in total dissolved solids even more than the projected value and the scenario in (1) above would be more intense.

3. If outflow does indeed occur in the spring before thermal and chemical stratification can take place, the salt would enter downstream environments where the volume is very small and where pooling in embayments would result. Some of the downstream waters already carry a significant load of chlorides.

4. Since the Mary Jane Reservoir is also a domestic water source, particular attention should be given to the potential impact on human health. The reservoir is already located in a region where water of superior quality is scarce. Commercial salt is of a low grade of purity and always contains a variety of contaminants which are not destined for human consumption. The amount and type of these materials vary with the initial source and method of processing; in Canada, the bulk salt can originate as mined rock salt, or from evaporation of brine from underground salt deposits, or from solar evaporation of sea water. Aside from sodium chloride, commercial salt contains calcium and magnesium chlorides, as well as cobalt, iodine, iron, copper, zinc and manganese, and, depending on the lot, lead and cadmium. There may also be other halides, borates, bromides, arsenates, etc., many of which are toxic even in small quantities. In the present situation, it is unlikely that information is available with respect to how much of them will be deliberately added. One tonne of salt can contain substantial amounts (gram quantities) of some of these things. The Mary Jane Reservoir is already subject to various

kinds of abuse through recreation, runoff and irresponsibility on the part of some members of the public. The health of the people who use the reservoir as a water source deserves a better managed resource.

It is counter productive to use salt in view of the detriment to the environment, the biota, and to human health. It is recommended therefore, that alternative measures to placing the gravel be considered, such as using a barge or boat so that salt is not required.

In conclusion, we would like to urge that the deliberate application of salt to the Mary Jane Reservoir be reconsidered in light of regional water quality and quantity conditions, unsuitable basin morphometry, and human health concerns.

Submitted by the Water and Waste Committee, Manitoba Environmental Council.
January 11, 1989

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MANITOBA ENVIRONMENTAL COUNCIL BRIEF TO THE MINISTER OF NATURAL RESOURCES ON THE PROVINCIAL WATER POLICIES

INTRODUCTION

During the past three months, Manitobans have been introduced to the government's concept of sustainable development under the heading of "Land and Water Strategy: The Process Begins" through the publication of the Workbook on Water. The joint statement by the Honourable Jack Penner and the Honourable Glen Findlay to concerned Manitobans concludes, "A water management strategy can only be developed through your input and involvement. Government alone cannot take on a challenge of this magnitude without first asking you to pitch in and voice your ideas, concerns and visions. Together, we can guide the management of our water resources and ensure their viable uses".

The Manitoba Environmental Council agrees with the above statements. We commend the government of Manitoba and in particular the Departments of Natural Resources and Agriculture for developing a preliminary framework, the Sustainable Development Strategy, and for drafting a Water Strategy and initiating a period of public consultation on it.

PROCESS

Many aspects of the presentation of the Water Strategy and the public consultation process are very welcome to the Environmental Council. The workbook concept invites and facilitates response by people from a wide variety of backgrounds. We found that copies of the Workbook were readily available on request. The public meetings in January and February 1989 were

held in a reasonably wide number of communities thereby allowing many citizens to speak briefly on the policies. The Ministers made themselves available to hear and respond to citizen's comments.

The Environmental Council, composed of volunteers, would have welcomed a longer period between the release of the Workbook on Water and the public meetings, as well as a longer overall public consultation period than that outlined. Provincial water policies are of such crucial importance as to warrant careful and detailed consideration by environmental and other citizen's groups.

It would be desirable to have a transcript of each of the public meetings available to the public on request. As well, in future we would like to suggest that the public meetings and the workshops be videotaped and the tapes made available for broadcasting by public service television. For further public access to the public consultation process, we suggest that all the briefs received by the government on the Water Strategy be listed, that this list be distributed at least to those who received copies of the Workbook on Water and, if possible, to those attending the public meetings, and that copies of the briefs be made available to members of the public upon request.

Most important, however, is the process by which the policies were prepared and released for consultation. The process is reminiscent of that used for the drafting of legislation, e.g. the Manitoba Environment Act. That is, the document is drafted within government and released to the public for a period of public examination and feedback. While public consultation provides feedback to government, it is fragmented in nature. Unless there are public hearings, groups and individuals do not have the benefit of hearing the input of each other. The document may then be rewritten to a greater or lesser extent before being tabled in the legislature or parliament. If the public consultation is reasonably widespead, this is an appropriate mechanism for preparing legislation.

On the other hand, we submit, that policies of sustainable development, almost by definition, require a different approach. Sustainable development is a multi-sectoral process. In her James Marshall Memorial Lecture in New York on 19 October 1987, Gro Harlem Brundtland stated that "the Commission found that a major prerequisite to sustainable development is a political system that secures effective citizen participation in decision-making". The Report of the National Task Force on Environment and Economy also makes numerous references to citizen-based participation in sustainable development, including "we call on non-government organizations and industry to guide policy makers to make conservation strategies a reality".

Thus, a more appropriate process may have been the holding of public workshops around the province as a first step, to hear from various sectors their concept of sustainable development, to share information on the nature and present state of the water resources of Manitoba, to hear the specific problems various sectors face with respect to water, the specific future goals and new ways of meeting those goals. The multi-sectoral workshops could generate new approaches to the long-term handling of water not likely to come from any single sector. Then, perhaps a multi-sectoral team could have drafted policies, which then would be subject to public consultation and public hearings. Public hearings are an essential component of the process since they provide a full public record of the proceedings. Considering this latter public input, interim policies could be defined and reviewed by the Manitoba Round Table on Environment and Economy as components of the Manitoba Sustainable Development Strategy.

It is essential, however, that no strategies on any one resource be firmly adopted by Cabinet until all the interim strategies are in place. Sustainable development requires a holistic approach only achievable when the interim strategies for all the resources can be integrated into a unified whole, the Manitoba Sustainable Development Strategy.

For example, the Water and Soil Strategies cannot be finally drafted until Agricultural Land Development and Alternate Land Use are considered. In fact, all the resource sectors will fall into place like links in a chain forming a circle. The chain cannot be broken without destroying the strength of the whole.

SCOPE

Page 4 of the Workbook on Water states that provincial land use policies are already in place. The land use policies were prepared prior to the concept of a provincial SDS. It may be found that, when the resource sectors on page 3 of the Workbook are drafted, these policies will have to be rewritten. Therefore, the land use policies should be labelled preliminary now as are the water and soil strategies. However, it would be most useful to the general public to have in the next Workbook produced a contact number or address for obtaining a copy of the present land use policies.

Because water in Manitoba cannot be discussed without consideration of hydro-electric power generation, fisheries and forestry, at the very least, we suggest information on the state of these latter sectors and present policies be made available at the workshops on Water and Soil still to come.

We are pleased to see that a draft soil strategy has recently been released in the form of a Workbook on Soil. This should facilitate the integration of the soil and water strategies. Also favourable is the relatively large number of locations in the province for the Soil and Water workshops.

The lack of lead time between the release of the Soil Workbook and the first public workshop on Soil and Water is surprising in view of public response to the tight time frame allowed for the Water Strategy exercise. Time is required by many public interest groups to mobilize resources, consult members and prepare the most meaningful input. Copies of the Workbook on Soil seem to be less readily available than the Workbook on Water.

In the Workbook on Water, the provincial government continues to ignore Indian governments. For example, on the top of page 3, Indian governments deserve as much standing as municipalities in the proposal to prepare cooperatively strategies for basins and watersheds. Furthermore, there is absolutely no mention of Treaty Rights or Aboriginal Water Rights, both of which should be addressed or at least recognized in a water policy. An additional concern with respect to the omission of consideration of the native peoples is the lack of input into the strategies development process of the knowledge of the native people concerning their environment. This was particularly well demonstrated with respect to the Churchill-Nelson Diversion when the Southern Indian Lake community predicted, much more accurately than the scientists, the scale of environmental damage to Southern Indian Lake by the flooding and had knowledge of the nature of the ice at spring breakup on the Nelson River relevant to dam construction, not possessed by the Manitoba Hydro engineers.

As the map of the province on the inside cover of the Workbook on Water clearly indicates, the Hudson Bay drainage basin covers a large proportion of the province. Yet, the maps for these river basins were not included in the Workbook. The map in the supplement on Manitoba's Northern Basins is of much poorer quality than those produced in the Workbook. We urge that good quality river basin maps for the northern rivers be made available and that they show the river systems as they are after hydro-electric development. Focus on this drainage basin is particularly important since much of the new development for Manitoba will occur within it. It includes most of the least known land and water areas in Manitoba and most of the pristine areas of the province lie within its boundaries.

GENERAL COMMENTS

The Workbook omits mention of two very important processes. One is on-going education on water both in schools and for the public in general. Provincial efforts in this area could be integrated with those of

federal government agencies, e.g. Water Resources Branch, attempting to increase access to the broad base of data and information on water they possess. The second process not mentioned is mechanism for public input into on-going revision of the water strategy and into the decision-making on the delivery side of the strategy.

A provincial water strategy is incomplete without a policy on the establishment of standards for drinking water quality, monitoring of drinking water quality and special efforts to protect the present and potential aquatic sources of drinking water for Manitoban residents. For example, Clearwater Lake is a potential source of drinking water for The Pas. For this reason, as well as others, Clearwater Lake deserves special protection which at the present time it is not receiving. Provincial park sewage lagoons are still within the Clearwater Lake watershed. Mineral exploration is presently actively underway in the watershed.

It is desirable for the government to acknowledge how it has considered, in the drafting of the Water Strategy, the Federal Water Policy, water policies of adjoining provinces and territories and states of the U.S.

With respect to "Some Facts to Consider" on page 5 of the Workbook, the first fact is framed in such a way that it seems it will be used to justify large-scale interbasin transfers. The third fact, on seasonal and geographical flows, highlights the importance of planning to allow nature to run its course, rather than attempting to engineer it. In fact, it would be well to have at the base of the Strategy, the principle of minimal interference with natural hydrology, wherever possible.

COMMENTS ON SPECIFIC POLICIES

In all of the policies, it would be useful to have some examples of the sort of implementation that is visualized.

Policy 1

Objective - Add "and terrestrial" between "aquatic" and "ecosystems". The over-riding policy should be that the government will strive for prevention of pollution in order to minimize the requirement for more difficult and more costly after-the-fact remedial action.

Policy 1.1 - Might be reworded "To protect Manitoba aquatic ecosystems and the uses made by Manitobans of those systems".

Policy 1.2 - "enhanced" should be replaced by "maintained or restored". Not clear what is meant by "active management". Minimal management/interference may be the best policy unless aquatic systems are damaged or polluted.

Policy 1.3 - Change "enhancement" to "restoration". Return waters to their natural water quality, whenever possible.

Policy 1.4 - Not clear what it means to "improve" wastewater discharges. We suggest water quality objectives which are river basin-specific rather than province wide to accommodate natural variation in water quality.

Policy 1.5 - The primary goal should be to eliminate pollution even if it means changes to human activity. Design the program to minimize pollution, not minimize disruptions to human activity. Some established land and water uses are inappropriate in sustainable development and should be altered.

Policy 2

Objective - Add "intrinsic" to "economic, aesthetic and environmental". The need to protect habitat as a means of ensuring genetic diversity and as a means of protecting rare and endangered species should be added.

Policy 2.1 - Good. The establishment of ecological reserves while the opportunity still exists should be mentioned. In fact, some of the pristine areas of Manitoba are of national and world class, e.g. the Seal and Hayes as Heritage Rivers.

Policy 2.2 - "Regulation" should be added as a means in addition to "incentives".

Policy 3

Objective – This should acknowledge that the economic and other uses are based on the maintenance of the integrity of the aquatic ecosystems. Also water conservation must be included. This policy should encourage conservation of use (e.g. domestic appliances), less consumptive practices and technologies, efficiency of irrigation and encouragement of dry land farming.

Policy 3.1 – There is no indication of the criteria to be used in choosing between the different potential water uses, many of which are mutually exclusive. The words "the integrity of Manitoba's ecosystems as well as" should be added between "maintain" and "economic well-being".

Policy 3.2 – There is no indication of who will be involved in the allocation process.

Policy 3.3 – Control of groundwater development and utilization must include assessment of new uses or new technologies and prevention of problems. For example, evaluation of the new use of groundwater for heat pumps. When the water is directed back to the ground following this use, any pollutants must be strictly controlled.

Policy 3.4 – There is no indication of how the "priority of uses" is to be set, and by whom.

Policy 3.5 – Interbasin transfer of water should not be permitted until full examination of all relevant factors indicates they are both environmentally and economically sound. This policy in part is in direct contradiction to Policy 5 which aims to alleviate human suffering and minimize the economic costs of damages caused by flooding. In the case of the Churchill-Nelson Diversion, one arm of government, Manitoba Hydro, did not plan hydro-electric development to minimize the economic costs of damages caused by flooding. In fact, interbasin transfer and flooding (of Southern Indian Lake and associated rivers) was selected over other configurations for hydro-electric generation. Water transfers between drainage basins should be completely prohibited.

Policy 4

Objective – It is not clear how this objective relates to Policy 3. Change "develop" to "manage".

Policy 4.1 – Demand management should be started before demand for water approaches supply. We need pricing policies which discourage waste.

Policy 4.2 – Good

Policy 4.3 – It is not clear how wildlife and conservation areas and wetlands, if they require rehabilitation or infrastructure, will be treated under this policy. Does there have to be direct economic benefits from an expenditure before it will be undertaken?

Policy 5

Objective – Flooding is not entirely negative. Flooding is a part of the hydrological cycle, providing natural flushing and replenishment of nutrients. The principle should be to avoid human activities on areas subject to flooding or to undertake activities compatible with flooding, as much as possible.

Policy 5.1 – Ensure that development does not occur in these areas except where unavoidable.

Policy 5.2 – Examples here could be by encouraging retention and restoration of wetlands, which act as sponges, and sloughs and potholes.

Policy 6

Objective – It would seem more appropriate to enhance the economic stability of a variety of sectors which depend upon water. The practice of drainage must be examined for its long-term effects, both in a series of wet and of drought years. Drainage has negative impacts on ecosystems. The use of this technique should be minimized.

Policy 6.1 – There is no excess rainfall. There is only interference with the natural hydrological patterns by moving wetlands and other natural storage areas,

straightening watercourses, and so on. Drainage of alluvial fans has been shown to be a particularly damaging practice. An example is drainage of the alluvial fans off the Riding Mountain escarpment resulting in movement of the alluvial material into the drainage system and eventually into Lake Dauphin. The lake has subsequently been reduced in depth by one-third.

Policy 6.2 - Drainage of marginal lands should not be considered.

CONCLUSION

The essence of the Sustainable Development Strategy and the component policies should be the encouragement of a change in attitude and the motivation for modification of behaviour on the part of individuals and organizations. Change is at the heart of most concepts of sustainable development, based on abundant evidence that our present society is non-sustainable. The policies, as drafted, concern management of water, apparently in a society that will be encouraged to continue to operate more or less as usual. Had we defined and implemented policies like these decades ago we would undoubtedly not be facing today a restriction of future options. As the water policies are worded it is difficult to see the criteria by which many hard decisions concerning water use allocation will be made. Effective water management, however, is but one aspect of a sustainable development strategy on water. Fundamental change in every aspect of our lives and institutions is required and we believe that change must be driven by multi-sectoral agreement.

Piecemeal adoption of single resource strategies is the antithesis of sustainable development. We recommend that a water strategy is not adopted until the other resources sectors have been similarly examined. The strategies will mutually modify each other and must be integrated into a whole.

Prepared by an ad hoc committee, R. Howard, A. Manlar, M. Egan, W. Neily, N. Carter, K. Emberley, B. Pawlicki, D. Malley

BRIEF CONCERNING THE ENVIRONMENT ACT AND REGULATIONS

The Manitoba Environmental Council, recognizing the importance of a strong and effective Environment Act and Environmental Impact Assessment Process as a component of the development of a Conservation and Sustainable Development Strategy for Manitoba recommends amendments to the Act and Regulations as follows.

A. Amendments to the Environment Act

1. Revise the preamble [sec. 1 (1)] so that it clearly shows Manitoba's commitment to the principles of the World Conservation Strategy, including Sustainable Development; revise beginning to read "The intent of this Act is to develop and maintain an environmental management system in Manitoba which will ensure that the environment is maintained in such a manner as to sustain essential ecological processes and life-support systems, to preserve genetic diversity, to ensure the sustainability of utilization of species and ecosystems, and so to permit a high quality of life for Manitobans, including ...' (insert underlined).

2. Identify in the preamble [1(1)(b)] that one of the intents of the Act is to provide for the "assessments of environmental impacts" of developments (not merely the ambiguous term "environmental assessment").

3. Refine the definition of development so that it clearly applies to policies and practices, program designs and plans, as well as to projects.

4. Return the primary licensing power to the Clean Environment Commission to ensure that there is always some opportunity for evaluation of applications by a group of citizens at arm's length from the government, to minimize political pressures, and so that the appeal process is meaningful.

5. Revise section 6 to require the Commission to hold public hearings on an application whenever significant public concern is shown (say, 5 or more representations).

6. Revise definitions and relevant sections to recognize the distinction between an Environmental Impact Assessment, which should precede the decision to proceed with a development, and an Environmental Protection Plan (or "Impact Mitigation Plan") which should be done subsequent to such a decision, and is basically what is defined as "assessment" in the current Act. Recommended definitions are: "Environmental impact assessment means an identification and evaluation of the potential effects of a project on air, water, land, biota, and ecosystems" and "environmental protection plan means that part of a project plan that ensures that appropriate environmental management practices are incorporated into all components of the life cycle of a development so that impacts identified by the Environmental Impact Assessment will be eliminated or limited to those permitted by the license".

7. Insert a section (before Section 10) identifying the basic requirements of an Environmental Impact Assessment, including consideration of the additive and synergistic effects of a development on ecosystems within a planning or management area characterized as a geographical entity, having physical, social, or economic unity likely to be altered as a result of strain upon its carrying capacity. This section should also identify stages or screening procedures of general applications, and the need to consider alternatives.

8. Provide for public hearings into the development of terms of reference for major Environmental Impact Assessments and for Ministerial Agreements.

9. Revise definition of "offense" (Section 31) so that it is clear that failure to comply with the Act or regulations is an offense as well as violations or contraventions of them.

10. Add subsection (h) to Public Registry, "a description of the screening process that was applied in order to give a project its classification," and add "Commission" as well as "Director" and "Minister" in subsection(g)

B. Amendments to the Regulations

Provide in each of the Classes of developments in Regulation 164/88 a category for developments not otherwise included but considered by the Director, Minister, or the Commission as warranting environmental impact assessment.

C. Detailed Review

Establish a committee under the leadership of the Council to undertake detailed revision of the Act and Regulations, with a view to implementing the above recommendations and other refinements as needed.

BACKGROUND

The Environment Act enacted in 1987 was in some respects an advance toward better environmental management, but in other ways a reactionary step. The broadened scope, the increased penalties, and the inclusion of the City of Winnipeg were, for example, positive steps.

On the other hand, it greatly reduced the requirements and potentially the opportunities for public participation in decisions, and took the power to make the decisions away from the semi-independent and quasi-judicial Clean Environment Commission and put them in the hands of a civil servant of the department which does the evaluation and enforcement and whose Minister hears the appeals.

There is also widespread confusion in the Act between Environmental Impact Assessments (E.I.A.'s) and Environment Protection Plans (E.P.P.'s), and many other potentially valuable changes are either ambiguous or entirely at the discretion of the Minister or the Director. We want legislation that will not only permit a good Minister to do his job well, but that will also require one who doesn't care about the environment to apply the law.

A.1 A few years ago, Canada accepted the objectives of the World Conservation Strategy, and, more recently, the elaboration of its third objective (sustainability) by the Brundtland Commission. It remains to bring legislation and policies in line with these objectives and their inclusion in the preambles here would provide a useful yardstick for measuring the extent to which this law, as well as regulations and policies deriving from it, are compatible with the objectives. This could be especially important where interpretations have to be resolved by courts.

A.2 & A.6

One of the objectives stated in the background papers when this Act was being prepared was to provide a process for "Environmental Impact assessment" of developments. However, these are not required by any section of the Act, nor even mentioned as such. Throughout the Act there is confusion between the concepts of environmental impact assessments (prior to approval of projects) and environmental protection plans (including pollution control plans), which should normally be detailed after approval in principle but before any construction or implementation of the development. These changes would need to be reflected in the rest of the Act, and the committee proposed could work out details on this.

A.3 The present definition of development as "any project, industry, operation or activity..." could possibly be interpreted to include these broader concepts that have often greater environmental impact than individual projects, but these are not presently being considered, with a few exceptions, and we need the clarification to ensure that all aspects of government and industry start consistently including environmental sustainability in their planning.

A.4 From 1972 to 1987 the Clean Environment Commission (C.E.C.) was doing a fine job, under various governments, of objectively evaluating applications and applying appropriate limits and orders, with minimal political interference. The Department undertook research and technical evaluation, made recommendations, and enforced the Act and licences. This system seemed to work very well and provided members of the public with a real opportunity to have input knowing that a relatively impartial body would be taking all opinions received into consideration. People who were interested enough to be aware of their work were satisfied with it and relied heavily on the C.E.C. to protect us from pollution threats which most environmental organizations and individuals would not be able to examine, much less fight. It is still a mystery why the previous government chose to remove these quasi-judicial functions form the C.E.C. and give them to a civil servant in the Department that will be making the recommendations. As well as losing the benefit of the judgement of several independent individuals, this change inevitably increased the possibility of political influence on the granting of licenses, and likely increased the pressures on the Minister to no one's advantage. No matter how well-intentioned the government or officials involved, the public is going to have more confidence in judgements made by a semi-independent body of recognized competence. The increased volume of applications that should result from the new Act could provide some logistic problems for the C.E.C.,

but these could be resolved by having it delegate evaluation of routine applications covered by regulations to the Department and/or re-assigning some Departmental staff to the Commission.

A.5 This is to restore the opportunities for public input, and to guarantee that the C.E.C. does not neglect this. It does not go as far as the old Clean Environment Act, where a public hearing could be required if one concerned individual called for it, but tries to reach a compromise between that and the present law, under which public hearings are never required on applications. (They are all at the discretion of the Minister). The committee could resolve the question of what represents "significant public concern".

A.7 This recommendation deals with a fundamental problem of most E.I.A. processes, viz., the tendency to consider project impacts in isolation, neglecting the cumulative effects on the environment of a wide range of human activities of various sizes. "Carrying capacity" here means the ability of an area to tolerate such activities without impairing the sustainability and integrity of its ecosystems. This, along with the general problem of identifying basic criteria and principles for various levels of E.I.A, has been a problem in many jurisdictions, and the committee should look at the methods used elsewhere in developing the specific amendments needed here.

A.8 To date, these have been done entirely internally by the departments concerned. Their importance requires that some opportunity for public input be provided.

A.9 The questions of enforcement and of application of the law to proponents who do not apply for licences remain priorities. The present Act provides that failure to comply with an order or license under the Act is an offense, but it seems that if there is no order or license, there must be a deliberate violation of the Act or regulations for there to be an offense.

A.10 This just extends the scope of Section 17 slightly.

B. At present it appears that unless developments are classed specifically under this regulation, no environmental license is needed for them.

C. A key step in getting effective amendments, such a committee could also be charged with obtaining public input on them.

Submitted to the Honourable Ed Connery, Minister of Environment & Workplace Safety and Health.

Prepared for presentation at the 6 May 1989, Annual Meeting by the Environmental Impact Assessment Committee.

POSITION PAPER:

ENVIRONMENTAL IMPLICATIONS OF THE CANADA-UNITED STATES FREE TRADE AGREEMENT

The Wildlife Committee of the Manitoba Environmental Council has considered the environmental implications of the Canada-USA Free Trade Agreement and agrees with the Canadian Environmental Law Association and many other environmental groups in Canada that the F.T.A. will result in severe environmental problems. Moreover, the F.T.A. violates the spirit and recommendations of the Brundtland Commission Report "Our Common Future" which the Government of Canada supported, as well as the recommendations of the Government's own Task Force on Environment and Economy. Therefore we recommend to the Minister that he consider carefully the environmental implications, as described in the Canadian Environmental Law Association's publication "Selling Canada's Environment Short", in his deliberations as Minister.

Submitted to the Honourable Ed Connery, Minister of Environment & Workplace Safety and Health

Prepared for presentation at the 3 December 1988, Semi-Annual Meeting by the Wildlife Committee.

REPORT ON RESPONSE TO COUNCIL BRIEFS

The purpose of this report is primarily to indicate the disposition of briefs and other recommendations submitted to the Minister following the previous Annual meeting on 14 May 1988 and the Semi-Annual meeting on 3 December 1988.

A brief on Wildlife Inventory in Northern Manitoba was passed at the 14 May 1988 Annual Meeting.

At the 3 December 1988 meeting, the Council passed three briefs and a position paper and adopted a brief in principle. The subjects of the three briefs were Public Examination of the Effects on Manitoba of the Rafferty/Alameda Dams Project in Saskatchewan, Forestry and Reforestation in Manitoba, Processing of Wastes in Manitoba's Smelters. The position paper dealt with the Environmental Implications of the Canada-United States Free Trade Agreement. The brief adopted in principle was entitled Hydro-electric Development: Environmental Assessment and Compensation Issues.

The Minister, Mr. Connery, responded on 19 January 1989 to the brief on Hydro-electric Development. He expressed full agreement with Council's recommendation that all hydro-electric development in Manitoba should proceed only with proper environmental impact assessment. The Minister replied, "Not only will there be the requirement for a complete environmental impact assessment of all future hydro-electric projects, but the process will begin at a much earlier stage of the project life cycle. The E.I.A. process and public consultation for possible future projects such as Conawapa and Wuskwatum will begin in the planning stage, before the formal regulatory process begins." The Minister did not agree with the concept of generic public hearings on the broad subject of hydro development. "This kind of broad philosophical discussion now takes place in the legislature and before its various committees, and is open to full public scrutiny". Mr. Connery commented further in support of the "proponent pays" principle but disagreed with the Northern Flood Agreement brief's assertion that virtually no benefits have flowed from it to the affected parties. Mr. Connery indicated he had forwarded the brief to his colleagues, the Minister of Energy and Mines, Hon. Harold Neufeld, and the Minister of Northern Affairs, Hon. Jim Downey.

On 11 January 1989, the Council sent a brief prepared by the Water and Waste Committee to the Minister on the Mary Jane Reservoir Fish Screen application. This matter concerns application of the Fisheries Branch, Department of Natural Resources, for a license to place a fish screen at the outlet of this reservoir. This involves the preparation of the reservoir bottom by the addition of gravel to ensure secure placement of the fish screen. The gravel would be applied on the ice. In order to prevent the gravel from freezing into a large mass before it could be moved into place, 1000 kg of salt is to be mixed with the gravel. A response was received on 30 January 1989 prepared by the Water Standards and Studies Section of the Department of Environment and Workplace Safety and Health. There was agreement with a number of points in the Council's brief, particularly with regard to the potential for contamination of the reservoir water with impurities in the salt. The Section did not agree that the salt itself was a serious hazard to the aquatic life. No economic alternatives to salt offer themselves. The Section recommended that the license be issued dependent upon the applicant submitting a representative sample of the salt for chemical analysis. The Section's conclusions were: "There is greater than a 90% probability that Mary Jane Reservoir will both fill during spring melt-water runoff and discharge water downstream to Mary Jane Creek. This will result in diluting and flushing the added salt

out of the reservoir." "Reasonable predictions indicate that the increase in total dissolved solids, sodium and chloride, following dilution, will not exceed guidelines and objectives for the protection of human health and aquatic life and wildlife."

No other written responses have been reviewed to date from the government to the briefs submitted. In response to the Forest and Reforestation brief the Minister of Natural Resources, Hon. Jack Penner, requested a meeting with Council representatives. This meeting was held on 19 January 1989 and resulted in an invitation to Council from Mr. Dave Rannard, Director, Forestry Branch to visit the Hadashville Forest Centre.

Diane F. Malley, Past Chair

MANITOBA ENVIRONMENTAL COUNCIL
EXPENDITURES
1988/89 FISCAL YEAR

Total Budget	13,800.00
Total Expended	17,764.00
Balance	(3,964.00)
Members Expenses:	
Transportation	5,759.22
Accommodations	1,608.53
Meals	963.91
Reg. Fees	20.00
Livery (Taxi/Bus)	143.90
Other	24.25
Total	8,519.81
Meetings:	
Transportation	208.62
Meals	348.06
Coffee/Refresh	210.73
Total	767.41
Office:	
Stationary	995.00
Publications	55.00
Telephone	1,367.00
Long Distance	435.18
Wats Line	762.32
Copier	1,482.37
Copy Paper	737.40
Word Processor	661.08
Postage	1,474.88
Courier	22.12
Bldg. Maint.	27.14
Other	403.38
Total	8,423.78
Staff Expenses:	
Private Vehicle	45.25
Other	8.53
Total	53.78
TOTAL	17,764.78

ANNUAL APPROPRIATIONS AND EXPENDITURES

The Manitoba Environmental Council is funded by a legislative appropriation to the Environmental Management Division.

Fiscal Year	Voted	Expended	Per Cent
1971-72	N/A	N/A	N/A
1972-73	2,500	N/A	N/A
1973-74	18,200	7,400	41
1974-75	17,100	15,000	88
1975-76	15,000	16,200	108
1976-77	13,100	11,700	89
1977-78	16,300	15,132	93
1978-79	16,900	16,621	98
1979-80	16,900	20,432	121
1980-81	16,900	16,894	99
1981-82	25,800	27,437	106
1982-83	28,400	36,144	127
1983-84	27,700	18,558	67
1984-85	12,700	23,067	172
1985-86	12,900	25,700	199
1986-87	12,900	17,500	135
1987-88	12,900	12,900	100
1988-89	13,800	17,764	129

MEMBERSHIP LIST

Mr. Bill Aitken (Nov. 1/77)
Mr. A.G. Allan (May 12/84)
Mr. R.M. Austman (Nov. 12/82)
Mr. John Barker (Nov.1/86)
Mr. Duncan Broadfoot (Dec. 7/88)
Mr. Andy Burzynski (Sept. 16/85)
Mr. Nick Carter (Dec. 7/88)
Ms Susan Derk (Nov. 1/88)
Ms Barb Draper (Nov. 1/88)
Mr. Jack Dubois (July 14/86)
Mr. Stan Eagleton (Nov. 1/88)
Mr. Martin Egan (Feb. 1/85)
Mr. Kenneth Emberley (Nov. 12/82)
Mr. Timothy Fultz (Feb. 14/80)
Ms Barbara A. Harding (Nov. 1/88)
Mr. Rick D. Howard (Feb. 15/77)
Ms Catherine Howlett (Apr. 1/75)
Mr. Tom Hyde (Nov. 1/88)
Mr. Bob Imrie (Jan. 17/80)
Mr. C. Robert Inman (Dec. 16/85)
Mr. Laverne Jaeb (Nov. 12/82)
Mr. Mike James (Nov. 1/85)
Mr. E.B. Johanson (March 19/82)
Dr. T. Jolly (Nov. 1/88)
Mr. Stan Kaczanowski (Nov. 1/88)
Mr. Chris Kaufmann (Feb 17/86)
Ms Barb Kendel (1986)
Mr. J.A. Knight (Mar. 28/79)
Mr. Ken Lacroix (Sept. 16/85)
Mr. William L. Langford (Nov 1/88)
Dr. A.M. Lansdown (May 14/72)
Mr. Chris Macdonald (c)
Dr. Diane Malley Feb. 14/80)
Dr. A.C. Maniar (Nov. 7/78)
Dr. Derek Muir (Aug. 1/78)
Mr. Dennis Muldrew (Feb 1/85)
Mr. Wayne Nelly (Jan. 11/80)
Mr. J.B. Nickels (Feb. 17/77)
Ms Betty Pawlicki (Oct. 24/78)
Dr. Eva Pip (July 14/86)
Dr. William O. Pruitt, Jr. (c)
Dr. David Punter (Jan. 25/73)
Mr. J.D. Robertson (Feb. 4/82)
Dr. I.M. Rollo (Oct. 24/78)
Prof. Basil M. Rotoff (Dec. 16/76)
Ms Ingrid Schram (June 2/86)
Mr. D.S. Shellenberg (Nov. 1/88)
Mr. Eugene Sheremeta (May 15/79)
Mr. Donovan Timmers (Dec. 7/88)
Mr. Jim Tomko (Nov. 1/88)
Mr. W.J. Turnock (Feb 18/74)
Mr. Murray W. Wagner (Jan. 14/83)
Dr. P.D. Watts (Sept. 16/85)

Ms Olga Weber (Sept. 15/81)
Mr. Barry Wild (Apr. 29/74)
Mr. Ian Wise (Dec. 7/88)
Ms R. Zimberg (Jan/72)

COUNCIL ORGANIZATIONS

Canadian Institute Forestry
Citizenship Council of Manitoba
City of Winnipeg Council
Clean Environment Commission
Eastern Regional Development Corporation
Entomological Society of Manitoba
Interlake Development Corporation
Junior League of Winnipeg
Keystone Agriculture Producers
Manitoba Association of Registered Nurses
Manitoba Association of Urban Municipalities
Manitoba Bar Association
Manitoba Farm Business Association
Manitoba Forestry Association Inc.
Manitoba Medical Association
Manitoba Naturalists Society
Manitoba Teachers Society
Norman Regional Development Corporation
Parkland Regional Development Inc.
Pembina Valley R.D.C.
Treaty Aboriginal Rights Residents
Union Manitoba Municipalities
United Steelworkers America
Wildlife Society, Manitoba Chapter

COUNCIL STAFF

Rory Grewar – Coordinator
Sharon Gluting – Administrative Secretary

PAST COUNCIL CHAIRS

The first organizational meeting of the Manitoba Environmental Council was held on January 28, 1972, when various task forces were set up to establish the Council's direction and operation. The following have served as the Council's Chairs:

1972–73 Lloyd Axworthy
1973–74 Lloyd Axworthy (to December 5, 1973)
Ken Arenson (balance of term)
1974–75 Ken Arenson
1975–76 Allen M. Lansdown
1976–77 W. J. Turnock
1977–78 Onno Kremers
1978–79 David Punter
1979–80 Rosemary Malaher
1980–81 Basil M. Rotoff
1981–82 Bill Kennedy
1982–83 Bill Kennedy
1983–84 Atish Maniar
1984–85 Atish Maniar
1985–86 Diane Malley
1986–87 Diane Malley
1987–88 Ian Rollo
1988–89 Ian Rollo

REPORT OF THE NOMINATING COMMITTEE

Recommendations:

Executive:
Chair: Wayne Neily
Vice Chair: Martin Egan
Secretary: Ingrid Schram
Past Chair: Ian Rollo

Technical:
Education: Andy Burzynski
Energy: Vacant
Environmental Chemicals: W.J. Turnock
Environmental Impact Assessment & Review: Chris Kaufmann
Land Use: Vacant
Water & Waste: Atish Maniar
Wildlife: Barry Wild

Regional:
Central Plains: J.A. Knight
Eastern: Rick Howard
Interlake: Eugene Sheremeta
Northern 1: Ed Johanson
Northern 2: Ken Lacroix
Northern 3: Barb Draper
Parkland: Barry Wild
Pembina Valley: Bill Roth
Western: Chris Macdonald
Winnipeg: Betty Pawlicki

General:
Membership Committee: Diane Malley
Publication Committee: Ingrid Schram

Atish Maniar & Diane Malley,
Nominations Committee

PUBLICATIONS LIST

The following is a list of M.E.C. publications, several of which are now out of print but available in photocopied copy from the Council Office.

Annual Reports:

1: 1973 (32 pp)
2: 1974 (74 pp)
3: 1975 (54 pp)
4: 1976 (79 pp)
5: 1977 (80 pp)
6: 1978 (87 pp)
7: 1979 (148 pp)
8: 1980 (101 pp)
9: 1981 (88 pp)
10: 1982 (68 pp)
11: 1983 (34 pp)
12: 1984 (33 pp)
13: 1985 (37 pp)
14: 1986 (54 pp)
15: 1987 (33 pp)
16: 1988 (30 pp)

Studies:

1. J.J. Keleher & K. Z. Hendin. "Manitoba Problems & Public Opinion" (1973), 5 pp.

2. W. G. Leitch & J.J. Keleher, "Garrison Diversion Project Presentations" (1974), 61 pp.

3. J.J. Keleher, "Manitoba Environmental Agencies and Activities" (1974), 4 pp.

4. D. H. Boyd, "Impacts of the Garrison Diversion Unit on Canada" (1975), 177pp.

5. K. B. Richmond & J.J. Keleher, "Manitoba 2000. Population Size and Distribution" (1975), 130 pp.

6. Ken Arenson, Chair, "Nuclear Energy: Fact and Fantasy" (1975), 35 pp.

7. H.J. Selwood. "The Winnipeg Townscape: A Survey Guide" (1975), 35 pp.

8. William Bell, Chair, "Rural Land Use Conflict: Some Solutions" (1977), 130 pp.

9. W. J. Turnock, Chair, "The Energy Issue: Demand and Supply" (1977), 162 pp.

10. Alex Fedoruk, Chair, "Manitoba Water Quality Objectives: How Far Do We Go?" (1978), 145 pp.

11. Peter Aitchison, Chair, "Trees and Pesticides: An Environmental Dilemma" (1978), 37 pp.

12. Ken Arenson, Chair, "Winnipeg 100: Alternative Futures" (1978), 112 pp.

13. Rosemary Malaher, Chair, "Environmental Education: Hope for the Future" (1979), 51 pp.

14. John Jack, Chair, "Parks for Manitoba: Policy and Practice" (1981), 48 pp.

15. David Punter, Chair, "10th Anniversary Celebration" (1982), 41 pp.

Topics:

1. J.B. Nickels, Chair, "Environmental Quality Preferences:" (1982), 22 pp.

2. Anna E. Polonyi, "Wildlife Designation of Manitoba Crown Lands: Problems and Conflicts" (1984), 75 pp.

3. Lloyd Axworthy and Ken Arenson, Chairs, "Southern Indian Lake and Hydro Development" (1984), 73 pp.

4. A. Tompkins, L. Krampetz, D. Muir, and D. Malley, "Survey of Environmental Monitoring Programs in Manitoba" (1984), 46 pp.

5. Diane F. Malley, Chair, "Environmental Practices and Manitoba Hydro" (1987). 37 pp.